

J. C. Kumarappa

Mahatma Gandhi's Economist

Mark Lindley

Foreword by Amlan Datta



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To Andrea

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"A most interesting and unusual book about a most interesting and unusual man. In this fine analytical study of the works of J.C.Kumarappa, Mark Lindley rehabilitates a forgotten pioneer and shows the vital relevance of his ideas to current debates in ecological and development economics. Written in elegant prose, this book deserves a wide audience within the academy and beyond."

Ramachandra Guha
Author and columnist

"Some of Mahatma Gandhi's ideas about economics were even more profoundly original than those of the several professional Indian economists whose writings have won them world renown. J.C.Kumarappa therefore deserves careful study as he was the first professional Gandhian economist. All scholars of Gandhian and ecological thought owe a debt of gratitude to Dr. Lindley for writing such a splendidly scholarly study of Kumarappa's career and economic ideas."

Pulin B. Nayak
Director, Delhi School of Economics

"This book by Dr. Mark Lindley, a historian on the persona and economics of Dr. J.C.Kumarappa, a noted Gandhian economist and a collaborator of Mahatma Gandhi, makes fascinating reading. Kumarappa was not a dreamer, an utopian or a simplistic Gandhian economist derided by the economic profession in India but a well-schooled economist. He learnt his economics from professors E.R.A. Seligman and H.J. Davenport of the Columbia University in the U.S.A., which has wider dimensions. Economics for him was a humane science imbued with deep ethical import. He tried to harness his economics for solving India's poverty in a practical and effective way, though his policy prescriptions were often ignored in post-independence India. Dr. Lindley has well succeeded in demonstrating that Kumarappa was ahead of his times when he locates similarities of some of Kumarappa's ideas with Gunnar Myrdal's in the latter's famous work Asian Drama."

Deena Khatkhate
Former Economic Advisor, International Monetary Fund;
Managing Editor, *World Development* (an academic journal)

"I am impressed by the thoroughness of Dr. Lindley's research. Kumarappa's thought deserves to be better known, because it has been little appreciated that an economist expertly trained in the Western tradition of economic thought was able to uncover, from that same tradition, a humanistic science very much at variance with the standard model promoted by the economics establishment."

Dr. Roy Lisker
Editor, *Ferment* magazine and author of *Debreu and Reaganomics*

"Mankind has to meet the challenge of balancing economic welfare with global justice and ecological sustainability, but orthodox economists have failed to take on the challenge. In this meticulous study Mark Lindley not only tells the fascinating story of an almost forgotten Gandhian economist but also recounts the history of economics in light of the quest for justice and sustainability. He sorts out the diverse influences upon Kumarappa's work, compares it to Gandhi's views, and relates it to more recent studies by Gunnar Myrdal, E. F. Schumacher, Amartya Sen and several others. I have read this book with genuine pleasure."

Jan Otto Andersson
Professor of Economics, Åbo Akademi University, Finland

"I have read this book with great interest. It describes masterfully J.C.Kumarappa's fight for an alternative civilization based not on egoism and rivalry but on solidarity, cooperation and ecological principles. It supplies a wealth of quotations from his writings and those of many relevant European and American economists, sociologists and philosophers. I would like to include a chapter on Indian and Gandhian economic thought in the next edition of my book on comparative economics. Even if the chances are now slim in India—and elsewhere—for a Scandinavian-type development combining a full-employment policy, welfare-state provisions and proper care of the environment, we can at least try to mitigate the excesses of the current type of globalization and create a long-term trend toward a better civilization."

Tadeusz Kowalik
Professor of Economics and Humanities, Polish Academy of Sciences

"I have read with enthusiasm this excellent work introducing Kumarappa's economic thought to Western academics and outlining for Gandhians in India the relevant history of Western economic theory."

Dr. Solomon Victus
Author of *Religion and Eco-Economics of Dr. J.C.Kumarappa: Gandhism Redefined*, and Visiting Fellow, Birmingham University, U.K.

"I am seeking to arrange for this excellent study to be published in Italian translation."
Alberto L'Abate
Professor of Sociology, University of Florence

"We are grateful to Mark Lindley for this outstanding work on Kumarappa and alternative traditions in economics. For this beautiful work of art, gift of thought and labor of love. Lindley, like Gandhi and Kumarappa, is a friend of the world. This book is an inspiring companion to all of us and needs to be studied not only by economists but by all concerned human beings interested in survival and transformation in this fragile Earth of ours."

Dr. Ananta K. Giri
Humboldt Fellow, Albert Ludwig University, Freiburg

"This book introduces us to the world of a highly sophisticated economist from whom present-day economists of the non-European regions have much to learn. Kumarappa's view of the transformation of the Indian economy under the British ... included a critique of the way in which orthodox Western economic theory abstracts an allegedly natural, impersonal market from all manner of social and political as well as ecological aspects of human life."

Huricihan Islamoğlu
Professor of Economics, Boğaziçi University, Istanbul
and Central European University, Budapest

CONTENTS

Foreword by <i>Amlan Datta</i>	vii
Author's Acknowledgements	xiii
Two Portraits of Kumarappa	xiv
Author's Introduction	1

Biographical chapters:

1. Before Meeting Gandhi	4
London	
Bombay	
American sojourn (i)	
Seligman and Davenport	
Kumarappa's first book	
2. Working with Gandhi	23
First phase	
Jail and Bihar	
The AIVIA	
3. The Last Decades	39
Jail again	
After World War II	
Semi-retirement	

Supplementary sections:

1. Some Theoretical Background	58
Some orthodox precepts	
19th-century normative economics	
Proponents of trusteeship	
The Luddites and Marxism	
Jevons, Marshall	
Neo-orthodox theory	
Institutional economics	
Early 20th-century welfare economics	
Prehistory of Open-system economics	
Summary	

2. Some of Gandhi's Views	89
Ruskin and Gandhi	
Poverty	
Trusteeship	
Bread labor	
Factories	
Spinning	
Self-reliance	
Barter	
Pantheism, Ecology	
Population	

3. Some Broad Comparisons	114
-------------------------------------	-----

4. Some Examples of Later Developments	117
A modern welfare economist	
Two "neo-institutionalists"	
The "Nobel Prize"	
Open-system economics	
Some female economists	

5. Reflections	143
Kumarappa as a Gandhian	
As AIVIA administrator	
His knowledge of the economy	
His view of mathematically formulated economic theory	
His institutional and ethical perspectives	
His place in the history of "small is beautiful"	
His place in the history of ecological economics	
Kumarappa's and Gandhi's greatest mistake	
Some links among these themes	
Psychology and risk	
Kumarappa vs Nehru	
Kumarappa vs Gandhi	
Kumarappa and Western economic thought	

Appendix 1: Some Books Read by Kumarappa	167
--	-----

Appendix 2: An Essay by Kumarappa on India's Economy as of 1942	182
---	-----

Works Cited	191
-----------------------	-----

Index	224
-----------------	-----

FOREWORD

Although "globalization" bids fair now to conquer worldwide the seats of power more completely than any religion ever did in the past, the venerable tradition of economic thought from which it derives support has not gone unchallenged. Some unorthodox ideas probed by thinkers like Ruskin and Gandhi, which until recently were treated in academic circles with scant respect, are now receiving more attention than they did in the 20th century. Prof. Lindley's admirable book on J. C. Kumarappa is part of this new development.

Let me outline briefly some aspects of the historical context. In terms of intellectual history the mainstream of traditional economics is normally traced back to Adam Smith (1723-1790), Ricardo and J. B. Say, whereas the academically acknowledged opposition to that tradition started with Sismondi and was taken up by Marx and his disciples. The orthodox stream of thought accommodated in due course some innovations of sufficient importance to justify the historians' distinction between classical and neo-classical economists, but retained an unbroken identity by virtue of its steadfast support for industrial development based on the market system. (Those who have reposed faith in the efficacy of the market's "invisible hand" have usually attributed to the State a valuable complementary role. Smith himself had included among the "duties of the sovereign" that of maintaining certain "institutions which may be in the highest degree advantageous to a great society ... though they could never repay the expense to any individual or small number of individuals.") Marx and his followers criticized capitalism but favored industrialization and praised the bourgeoisie for promoting industrial growth in a phase of history which they expected to end quite soon. Thus the heterodox ideas represented by Ruskin and Gandhi stand apart from orthodox economic thinking and also from that of its accredited Marxist critics who, while disapproving of capitalist "relations of production," approved of the Industrial Revolution as part of the forward march of the "forces of production."

In regard to political and economic history, it seems fair to say that (1) humankind is still divided into "tribes" but their destinies have now become so interrelated that humanity confronts in many ways a common fate for better or worse, and (2) if we seek a main theme of modern history we may with reason find it (as Toynbee did) in an inexorable drive toward industrialization in different parts of the world: first in England, then in Germany and the USA, then in Russia and Japan, and then in several other countries.

"The nation pays through the nose for its armaments program, holds raw-material producers in political bondage, and sacrifices its sons. When the cost of production includes all these, who will say that centralized production is cheaper?"

Kumarappa's argument bears the marks of the Indian experience and is not equally well applicable to other countries at all points. But the general thrust of the reasoning deserves consideration as much today as it did when it was first presented in the second quarter of the 20th century. To ignore its worldwide significance would be an unfortunate error.

Let me discuss this a little further. There are rival hypotheses as to where the roots of evil in contemporary society lie. Marxists (and many other socialists) have maintained that private ownership of the means of production is the main culprit, whereas Gandhians put the blame on over-centralization of power and excessive mechanization of production, as well as failings of human nature such as greed, fear and hatred. The Marxist hypothesis was tested by the leaders of the Bolshevik revolution as best they could — they abolished private ownership in the Soviet Union — but this did not bring about the abolition of injustice and the establishment of freedom. On the other hand, the Gandhian hypothesis has never really been tested; it still wants close examination.

What are the grounds for the Gandhian indictment of the then-modern industrial technology? Kumarappa's remark that "every person becomes a 'hand'" meant that mass-production robs the worker of his personal identity. When production is undertaken mainly with local resources and for local consumption the result is a "neighborhood economy" in which workers are integrated into a fairly stable society, but under big-factory production they are more often uprooted from their homes and burdened by the spectre of being thrown out of work and compelled to drift away, becoming thereby a "rootless proletariat" (E. F. Schumacher's phrase). This leads in turn to other unfortunate consequences of profound cultural and political importance. When people's capacities to satisfy their natural social affections are reduced too much, they seek compensation in ways that may be socially noxious. Thus the "external costs" of highly concentrated production can be reasonably estimated to be much higher than orthodox economists have cared to take into account. The issue of violence is closely related to this syndrome.

Why did all these nations, with their wide variety of cultural backgrounds, opt for industrialization? The answer which I have ventured to suggest* is that in most cases the choice was made, not really "because industrialization [of the kind adopted] seemed to guarantee greater welfare, higher culture or anything of that kind, but because ... it guaranteed [to each nation that made it] greater military power to resist the threat of subjugation by other, industrially advanced countries." Military power for the sake of national security or national glory has been the decisive consideration. To grasp this point is important for a proper understanding of the Gandhian critique of modern economics, according to which the question of industrialization is intimately linked with the deeper issue of violence and non-violence.

There is in fact a mutual connection between industrialization and military power. Not only has the quest for military power often prompted a nation to launch forth on a path to rapid industrialization, but also the requirements of such industrialization have dictated a high degree of centralization of economic and political power, most notably in the form of a national state. Even if a program of economic development accentuating large-scale industry may be adopted for non-military reasons, it usually requires for its efficient execution a centralized national administration. However, a strong national state tends by its very form and spirit to sharpen the struggle for power, thus giving rise to a vicious circle of violence with social costs that mostly escape accounting. Hence the Gandhian critique of modern industrialism. A few quotations from Kumarappa (drawn from Dr. Lindley's carefully compiled work) can show this. He and Gandhi had some disagreements, but Gandhi took no exception to these points:

"Under mass production, whether under capitalism or communism, every person becomes a 'hand' or a 'mouth.' ... We have invented machines that have become masters."

"While the plant that transforms raw materials into consumable articles is located in some one place, the ... raw materials are gathered from the places of their origin and brought together to feed the machinery ... at a speed demanded by the technical requirements.... [And then] when the goods have been produced they have to be sold. ... Exchange, customs and other financial and political barriers have to be regulated. ... All this can be done only at the point of the bayonet."

"The nation pays through the nose for its armaments program, holds raw-material producers in political bondage, and sacrifices its sons. When the cost of production includes all these, who will say that centralized production is cheaper?"

Kumarappa's argument bears the marks of the Indian experience and is not equally well applicable to other countries at all points. But the general thrust of the reasoning deserves consideration as much today as it did when it was first presented in the second quarter of the 20th century. To ignore its worldwide significance would be an unfortunate error.

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* Tagore Memorial Lecture, Indian Institute of Technology (Kharagpur, 2000).

Human violence is perpetrated against other humans and against Nature. While cruelty is hardly new, technology has now put at the disposal of men's untamed ferocity toward other men some vastly increased powers of mass destruction. Meanwhile violence against Nature has recently become a serious global problem, aggravated by a sea-change in human life-style. The "fast" life of modern high-tech society tends to deprive people of the simple joys of unmediated communion with Nature and of intimate companionship, and substitutes for these a new realm of marketable pleasures. This problem needs to be taken seriously: rampant consumerism has combined with persistent militarism to assault various non-renewable resources of Nature, and this threatens to undermine the welfare and even the safety of present as well as future generations of humankind.

E. F. Schumacher, who perhaps more than any other one person in the last half-century alerted public opinion worldwide about the gravity of the ecological problem, evoked a Gandhian theme when he wrote, in 1960:

"A way of life that ever more rapidly depletes the power of the earth to sustain it and piles up ever more insoluble problems for each succeeding generation can only be called 'violent'."

A few years earlier his work as an advisor to the Coal Board in England had prompted him to take a more circumscribed view:

"The whole problem of ... the exhaustion of non-renewable resources can probably be reduced to this one point — Energy."

What is crucially required now is a set of new, "appropriate" techniques to utilize systematically one or more sources of consumable energy that are renewable, "clean" and "safe." Neither fossil fuels nor atomic reactors satisfy this triple requirement; solar energy does. We shall have to go a long way, however, before such a new technology can be used really extensively. The innovations will most likely be compatible with, and may even require, a plan for more decentralized production, and will certainly call for and facilitate some appropriate changes in people's way of life. It will all amount to an unprecedented global experiment — which most likely can succeed only if it is accompanied and supported by a "philosophy of non-violence."

These were some of the goals of the Gandhian program. It had other goals less relevant to the world today. The Gandhian outlook has something vital to contribute to humanity's future, but first we shall have to

distinguish between what is "universal" and enduring and what was "culture-bound" in it. It seems to me that the stage is set for a historic debate. Can the "universal" Gandhian goals be realized? Can anything much less rescue humanity from the contemporary crisis?

Amlan Datta

CB 110, Salt Lake
Kolkata - 700 064

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I have many debts of gratitude. The staff of the manuscripts division of the Nehru Memorial Library in New Delhi went out of their way to be helpful, and so did my hosts at the J. C. Kumarappa Institute of Rural Technology and Development, and Sri K. M. Natarajan in Madurai. The National Gandhi Museum and Gandhi Smarak Nidhi (New Delhi) gave me encouragement and hospitality. Dr. A. K. Giri arranged for hospitality at the Madras Institute of Development Studies, and Mukunda Rao in Bangalore. The Humanist Chaplaincy at Harvard University awarded a grant-in-aid funded by Prof. Lisa Kuhmerker and Dr. Joseph Gerstein. R. K. Lee kindly helped with the illustrations.

Ramachandra Guha and the late Devendra Kumar Gupta gave me some invaluable advice and encouragement near the outset of my work. Drafts of the text were read and helpfully criticized by Prof. Jan Otto Andersson and Dr. Ralf Eriksson (Åbo Akademi University), Prof. Huricihan Islamoğlu (Boğaziçi University and Middle-East Technical University), Dr. Rabindra Nath Chakraborty (University of St. Gall), Dr. Y. P. Anand (Director, National Gandhi Museum), Andrea Perrault (President, Ethical Society of Boston), James Farmelant, who sent me numerous messages with useful information, and Russell Doane, who made helpful criticisms. At the Delhi School of Economics, Profs. Jean Drèze and Pulin Nayak kindly checked the pages on Amartya Sen, and I am very grateful also to Prof. Datta (now retired from the University of Calcutta and Viswa Bharati University) for his remarkable foreword as well as for some expert advice.

None of these people saw the final text before publication. It is due to my writing and revision, and I am solely responsible for it.

I wish to extend also my warm thanks to the Indian Council for Cultural Relations for sending me to Calcutta and bringing me to Prof. Datta, and to Popular Prakashan and especially Dr. Ramdas Bhatkal, the managing director, Shivani Ganesh, my editor, and Ratnadeep Adivrekar, who prepared the cover design.

INTRODUCTION

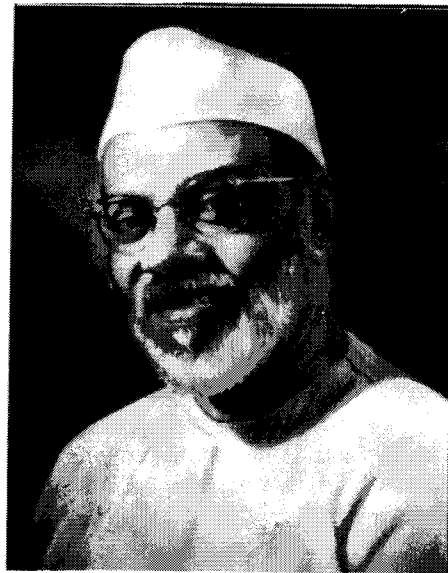
Two experts have advised me not to call Kumarappa "Gandhi's economist." An economics professor in Kerala told me in 1998 that Kumarappa was "a good man but not an economist,"¹ whereas an American-trained economics professor active in Hungary and Turkey told me, after reading a draft of this book in 2003, that Kumarappa was too important an economic thinker to be tagged a mere Gandhian.

I call him Gandhi's economist because he earned (in the USA) a graduate degree in economics and then collaborated, as an economist, for nearly twenty years with Gandhi (whose *Collected Works* refer to him more than 250 times). He coined the phrase "Gandhian economic thought" and earned a place in the history of some related ideas such as "small is beautiful," appropriate technology and ecological integration. I have written this book because his exact place in the history of such ideas has not been determined and no reasonably objective critical assessment of him as an economist has yet been attempted.

Different readers may share an interest in him while sharing very little of the pertinent background information. So I have designed the book in an unusual way. After describing his education and career I will sketch some relevant parts of the history of Western economic theory and of Gandhi's ideas about economics. (Some readers may turn first to one or both of those sketches. The footnotes give a lot of cross-references — less handy than links on the internet but still useful — and there is a very detailed index.) A concluding section will offer some of my opinions about Kumarappa, but without attempting a definitive historical assessment of him. He courted controversy, and economists generally tend to be so ideology-ridden,² and the history of some lines of thought pivotal to Gandhian economic theory is still so incompletely known, that an intelligent historical consensus about him is more than one should hope for just yet. I have therefore tried to avoid the kind of writing that would indicate which opinion of him the reader must have in order to be considered enlightened.



1928



1953

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1. This was at a Rotary Club meeting. Later at dinner I asked this professor which of Kumarappa's books he had read, and he replied, "None — he wasn't an economist."
 2. According to a neoclassical economist at Cambridge University, "We are encompassed by passionately held beliefs. There are those with burning convictions in the virtues of 'small' models and in the absolute need for 'full' models; in the uselessness of mathematics in economics and in its absolute necessity; in the need to postulate 'market clearing' and in the meaninglessness of this postulate; in rational-expectations models

Most of Chapters 1-3 is based on information in the official biographies of Kumarappa {VKC, VKQ}, in his papers (the catalogue of which runs to 140 pages) in the Nehru Memorial Library,³ in the books he took to south India upon his semi-retirement in 1953, which are still in his hut there,⁴ in commemorative publications about him, from interviews with people who knew him, from Gandhi's *Collected Works*, and from a recently published study {VRK} by Dr. Solomon Victus.⁵ For my fellow Americans I have included also some information about the two American professors who most influenced Kumarappa as a graduate student.

In Sections 1-5 I will tend to avoid the term "classical," because it seems (a) ideologically biased in a way that is poorly suited to a fair account of Kumarappa as an economist and (b) a little misleading when applied to economists like Ricardo and Say, since it implies a stature like that of the Parthenon or Newton's physics or Beethoven's symphonies.⁶ I will use "orthodox" and "neo-orthodox" for the tradition in question; these

and in the madness of such models; in the absolute need for historical and institutional elements and in a purely analytical approach; in short-run analysis and in long-run analysis; in the uselessness of all theorising and in the uselessness of econometrics and fact collection; in short, in almost anything that has ever been tried." {HEM, 7} Ideological biases sustain such passion. The ratio of heat to light may be a little higher in some business schools than in economics faculties. In 1988 a visiting professor at the Harvard Business School remarked, in the preface to a book {EMD} on economics, "The author [has] encountered strong reactions of the kind previously faced only when he dealt with issues such as the United States involvement in Vietnam." See also LID.

3. The address is: Teen Murti House; New Delhi - 110 011.

4. The address is: J. C. Kumarappa Institute of Rural Technology and Development; Gandhiniketan Ashram; T. Kallupatti (Madurai Dist.) - 625 702.

Appendix 1 surveys some of this material and some other books that Kumarappa can be shown to have read.

5. Dr. Victus's book came to my attention so late in the course of my writing this one (I was preparing the index) that I have been able to make less use of it than I would have liked. I had read already, but did not have occasion in this book to use, his detailed analysis {VSR} of Kumarappa's contributions to theology. (Kumarappa's *Practice and Precepts of Jesus* was written during a jail term when the British authorities allowed him to read the Bible only.)

6. Even though Newton's physics is inadequate for problems requiring quantum mechanics, it is still perfectly good for many complex modern problems such as guiding a spaceship; but nearly all the experts agree that "classical economics" is thoroughly superannuated. No one disparages the Parthenon even though many modern buildings are far more advanced technologically, and hardly anyone disparages Beethoven's symphonies; but many writers today disparage those "classical" economists' "laws."

terms are ideologically neutral and better suited than "classical" and "neoclassical" to the context of Kumarappa's mature views. A further terminological problem is due to the fact that now and then during the history of that tradition, more than one new idea has occasioned the use of the term "neoclassical."⁷ I will call Marshall "neo-orthodox," but without calling any later writers "neo-neo."⁸

For readers unfamiliar with Indian English I have used American spelling and punctuation throughout, and in the citations from Kumarappa have made some analogous adjustments in vocabulary and phrasing. In the main text and in footnotes I have used capital-letter abbreviations to designate books and articles; their titles and the authors' names are in the list of works cited. Capital Roman numerals stand for volumes, small ones for chapters (or, now and then, prefatory page-numbers). There are so many footnotes that now and then one of them will be found on the page before or after the page on which it is referred to.

A complete essay by Kumarappa is appended so that readers can readily judge him by a little more than my writing plus mere snippets from his.

7. According to *ANC* the term was, in writings on economics, first used (to refer to Marshall) by Veblen {VES} in 1900.

8. Samuelson would be a good candidate for such a label. He undertook "a 'neoclassical synthesis'" in the third and later editions of his textbook {SLA, 809}.

Kumarappa was born into a Christian family in the town of Tanjore (near Madurai in south India) in 1892. He was baptized Joseph Chelladurai Cornelius — "Cornelius" being the English name which his paternal grandfather, an Anglican clergyman, had taken and which his father, an officer in the colonial civil service, always used. It was in the late 1920s that he reverted to his grandfather's original Indian name.⁹

His mother was (he later recalled) pious, strong-willed, and attentive to "love of her neighbors ... expressed by her attempt, however humble it may have been, to help those in distress" {VKQ, 2}.¹⁰ She had him raise chickens, took him to the bazaar to buy their feed, and helped him sell the eggs; he kept the accounts; the profits supported an orphaned schoolmate.

He attended a Christian college in Madras (Doveton College) where his main field of study was history and he was "drilled" {KEW} to believe in "the trusteeship of the British Government, their well-meaning bureaucracy and their God-sent mission."

London

After graduating from Doveton College he left India in 1912¹¹ and became a chartered accountant (FSAA) in London, where he practiced in 1918-19 in a firm of accountants and auditors. In a letter of recommendation written in 1919, the General Manager of St. John's Engineering Works (under the control of the Ministry of Munitions) described him as having "a very wide grasp of the financial side of business, so much so that it would be most beneficial to any businessman to follow Mr. Cornelius' most lucid and comprehensive directions." He added:

"I must pay Mr. Cornelius the compliment that few Britishers here have the same clever grasp of detail."

9. For a while he spelled it "Coomarappa" (and this has enabled me to infer the approximate dates of some undated documents). Many recent bibliographies give his name as "Joseph Cornelius Kumarappa," no doubt because that is how it appears on the title page of the first edition of his first book {KPF}. But he himself never once used that name, as far as I know. For the last thirty years of his life he would always write, when spelling out all three words, "Joseph Chelladurai Kumarappa."

10. This is noteworthy because contemporary British economists regarded man "solely as a being who desires to possess wealth" (see note 142).

11. My source for this date is the biographical sketch in VRE.

This commendation, and the fact that Joseph kept on hand for the rest of his life his copy of a detailed book {WAC} on ascertaining production costs, help show why in later years he felt competent to argue¹² that big factories are not really efficient but, to a large extent, merely displace costs from their owners to the public — for instance to taxpayers, to people at whose occasional personal cost a colonial power's armed forces maintain access to its resources and markets abroad, and to certain people in the colonies. Indeed the fact that "St. John" (as it were) was engaged in the munitions line resonates with the first sentence in the following passage from one of Kumarappa's official biographies, referring to London when he was there:

"War was ... looked upon as a necessary part of a well-ordered society.... The one ... bright spot ... was that the British in their business relationships took care as a rule to see that the individual's pursuits did not mar the nation's good. [A] favorite slogan ... [was] 'Never make a mistake which will cause another man to fall.'¹³ And ... his principal's wife, who was a lady of high public spirit, ... whenever he bought anything shoddy ... would ... [tell] him of the consumer's duties ... [and of how] such inferior goods may only tend to bring disrepute to the nation's manufactures.... This notion of a consumer's responsibility impressed him greatly." {VKQ, 10}

For Christmas 1918, one Grace Hughes gave to "Mr. Cornelius with best wishes" a book {MGS} which he also kept with him for the rest of his life: an anthology of writings by Prentice Mulford (1834-91), a minor "Boston Brahmin" (the major ones were Emerson and Thoreau) who blended piety with quasi-Hindu sentiments and a quasi-Puritanical sense of ambition. The passages that Joseph marked out are given in Appendix 1; here are a few samples:

"Christ never preached that it was a duty to live poorly.... If we ... pray in this spirit: 'I want ... what I want [even if it] is an injustice to others...', then we shall in time ... receive what we desire, if persistent in that desire or prayer. But it will prove an imperfect gift ... with more of the bitter than the sweet — as much a curse as a blessing."

"Prove the wrong by showing a better way."

"The Infinite Force has innumerable new paths and plans for men and women, few of which are now known, and you, as one of those men and women, have also your peculiar path and plan into which you must be led of your own spirit...."

But of course not everyone who reads such advice tries to follow it.

12. See p. 34.

13. See note 272 and the citation from Gandhi to which it refers.

Bombay

At his mother's request, Joseph returned in 1919 to India. He lived in Bombay, worked as an auditor and as a lecturer in accountancy at Davar's College of Commerce, and in 1925 co-founded an auditing firm, Cornelius and Davar.

While serving for some years on the board of directors of the Young Men's Christian Association in Bombay, he also evidently joined the Freemasons, acquiring five of their pamphlets written for members only {FMH, FMP, FMR (acquired in 1922), FMS, FMU}. With the benefit of hindsight one may wonder if he was beginning to find inadequate the world-view of his previous mentors.

American sojourn (i)

Each of Joseph's three brothers earned a Ph.D. degree abroad. The eldest took his in New York City¹⁴ and in 1927 invited Joseph to visit him there. After a month of vacationing in the USA, Joseph attended Syracuse University (in northern New York State) and earned, early in 1928, a B.S. degree in business. His studies included a course in public finance¹⁵ under a professor (Harvey W. Peck) to whom he submitted an eleven-page, hand-written thesis entitled "Tax-Exempt Securities and Progressive Surtax." The essay sets out the following initial premiss:

"Tax exemption, whether virtual by evasion or actual by statute, leads to the formation of a privileged class which does not share the burden of government, thus violating one of the important tenets of democracy which demands that every citizen should contribute, according to his ability, towards the expenses of maintaining a stable government."

—but then discusses, with citations from Andrew Mellon and ten other writers, the argument that:

14. An article of 21 July 1928 in a leading Indian newspaper (*The Hindu*) has the headings, "The Ku Klux Klanism in America / An Aspect of Protestant Christianity / By Dr. J. Cornelius, M.A. (Harvard), M.A., Ph.D. (Teachers College, Columbia)."

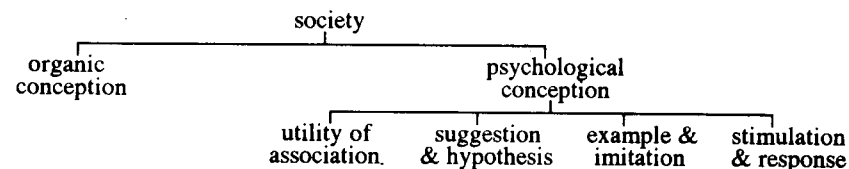
15. The textbook (which Kumarappa took with him into retirement 25 years later) was H. L. Lutz's *Public Finance*. Lutz was an advocate of lower income taxes and higher sales taxes, and during the Second World War was to oppose the use of price controls because he "believed in the operation of the law of supply and demand." Then he became a consultant to the National Association of Manufacturers. One of his last books (1947) is entitled "The American Way."

"By issuing tax-exempt securities, government is able to obtain funds at a low rate of interest and it saves expenses of administration that would be involved in obtaining money at market rates and paying back higher interest."

It concludes that if there is a "steeply progressive" tax on incomes, then to offer the exemptions is unsound because it is likely to draw capital out of industry.¹⁶

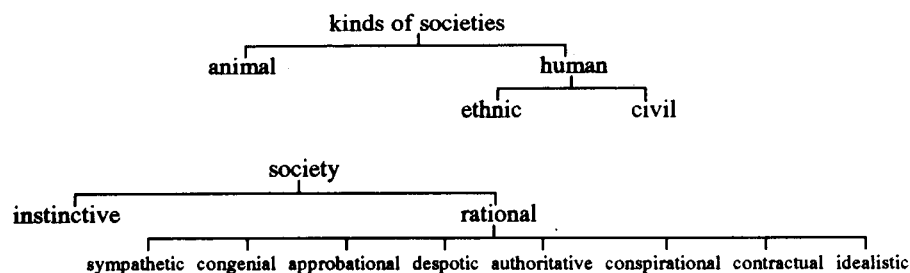
The professor found in Joseph "an excellent student ... [and] a man of mature judgement, wide experience and broad culture," and recommended that he pursue graduate studies at Columbia University in New York City, which he did.

In New York he lived at International House (at 500 Riverside Drive) and earned an M.A. degree in public finance. This year of his life is well documented. Two economists at Columbia influenced him so much that I will discuss them in a separate section. Besides studying with them, he took courses on the history of monetary and credit theory (writing a 21-page paper on financial panics and currency control), on "social economics," on the "trust problem" (i.e. monopolies, not trusteeship), on current international economic problems (labor organization, the sugar market,¹⁷ rivalries in Manchuria between China, Japan and Russia, and war debts and reparations, about which he wrote a 15-page paper), and on the "principles of sociology"—for which his 23 pages of notes include several diagrams in the following vein:



16. A taste for pungency becomes apparent when a nursery rhyme is cited halfway through the essay — "Bobby Shaftoe has a hen, / Cockle Button, Cockle Ben, / She lays eggs for gentlemen, / But none for Bobby Shaftoe"—to complement a citation from the Bible (MG, xxv, 29): "Unto him that hath shall be given ... but from him that hath not shall be taken away."

17. This is shown in his notes; the instructor had initially planned (according to the university's catalogue of courses for that year) to discuss the wheat market instead. Sugar is of historical interest because of its role in regard to wars in America and because of Kumarappa's unsuccessful attempt in the 1950s to persuade the Indian government to favor the production in India of unrefined sugar (for domestic consumption) rather than that of refined sugar (mostly for export; cf. *REH*, 111-112).



Years later he would devise analogous classifications of his own.¹⁸

In the spring (of 1928) he began to give public talks on India. The picture shown here is from a flyer he had made at that time. In May and June he spoke at the Fifth-Avenue Presbyterian Church, and in July at International House on "Women in India: Their Status in the Social Order."¹⁹ This lecture was one in a series of six sponsored by the Hindustan Association of America. Joseph saved a two-page abstract of a lecture given by one Hemendra K. Rahkit in the same series. The lecture was entitled "Present Economic and Social Outlook in India"; here are some excerpts from the abstract:



"I. Importance of a sound economic basis for a balanced development....

III. Factors responsible for the transformation of once industrial India to primarily agricultural region.

- i. Till the first quarter of the 19th century India was leading in industry....
- ii. Industrial revolution vs. cottage industry. Destruction of the latter. Between 1814 and 1835 India's cotton export to England fell from 1,266,000 pieces to 306,000, while that of England [to India] rose, during the same period, from 818,000 yards to 51,777,000 yds. The population of the city of Dacca shrank from 150,000 to 30,000 by 1840....
- iii. India's political and economic subjection to Great Britain hampered the introduction of the new factory system of production to India....

18. See pp. 39-44.

19. He began with a charming disclaimer: "I do not know what my qualifications are to entitle me to speak on this subject unless it be that I have six sisters, most of them senior to me. Now with this information you would know that if I say a good word for them it must be true..."— and went on to argue that "the question of the status of women resolves itself into considering their position in the family and in the Indian home life."

IV. Effects of the above policy on India.

- i. Decline of industry and agriculture.
- ii. Social and economic degradation of women.
- iii. Abject poverty....

VII. Cottage industries. Their importance in India of today where a farmer remains idle for about 125 days in a year. Brass, potteries, embroideries, spinning-wheel and Mahatma Gandhi....

XII. Conflict of economic interest between Great Britain and India. Competition or coöperation."

Before leaving New York he prepared lectures on "Gandhi and the Economic Regeneration of India" and on "India's Reaction to Western Influence." His outline for the latter includes the following:

"India: Caste system and joint family system. No competition.... No emphasis on wealth.

"West: Basically a competitive regime. Individual wealth and acquisition emphasized."

I don't know if he ever gave such lectures in the USA. In November, however, he gave at the Community Church of New York²⁰ a talk, informally entitled "Why Then is India Poor?", which changed his academic career. (See below.) And a week later he snipped out from *The New York Times* a news report entitled "Methodists Decry Wealth of Nation":

"America is restless and unsatisfied, joining with the rest of the world in a state of uncertainty and doubt, according to a report adopted today by the ... Methodist Episcopal Church at the conclusion of a three-day conference.

"Our wealth has made us rich and left us poor," the report stated, 'and it has increased our power and destroyed our peace. It has surrounded us with external benefits and left us inwardly bereft. We have spent our money for that which is not bread and our labor for that which satisfieth not.'

"Prophets rather than statesmen are better fitted to bring about a lasting world peace, in the opinion of the committee framing the report...."

20. This prestigious church is at Park Avenue and 34th Street (very near the Rockefellers' Manhattan residence at 1 Park Avenue). Joseph's talk was part of a weekly "Community Forum" on Sunday evenings. A week before, the topic had been "The Elections in Retrospect. What Happened [as Herbert Hoover was elected president] and Why"; a week later, "Politics in America. What My [Norman Thomas's] Experience as a Presidential Candidate Taught Me" (Thomas was the Socialist Party's candidate); then in December, "The American Empire's Next Step." While in New York, Joseph purchased Daniel J. Fleming's *Contacts with Non-Christian Cultures... A Case-Book in the Christian Movement Abroad*.

In New York he also acquired (while still going by the name "Cornelius") a copy of Tagore's *Sadhana*. (Gandhi had read it in 1923 during his first jail term in India.) It is, as the "Author's Preface" suggests, an account of Hindu ideas:

"In these papers, it may be hoped, Western readers will have an opportunity of coming into touch with the ancient spirit of India as revealed in our sacred texts and manifested in the life of today.... For Western scholars the great religious scriptures of India seem to possess merely a retrospective and archeological interest; but to us they are of living importance."

The first chapter is entitled "The Relation of the Individual to the Universe," and begins as follows:

"The civilization of ancient Greece was nurtured within city walls. In fact, all the modern civilizations have their cradles of brick and mortar.

"These walls leave their mark deep in the minds of men. They set up a principle of 'divide and rule' in our mental outlook, which begets in us a habit of securing all our conquests by fortifying them and separating them from one another. We divide nation and nation, knowledge and knowledge, man and nature.

"...[But] in India it was in the forests that our civilization had its birth, and it took a distinct character from this origin and environment. It was surrounded by the vast life of nature, was fed and clothed by her, and had the closest and most constant intercourse with her varying aspects.

"...The West seems to take a pride in thinking that it is subduing Nature. ...[But] India put all her emphasis on the harmony that exists between the individual and the universal."

Perhaps equally significant was the influence of two books published by missionary organizations. (He inscribed them "J. C. Coomaraappa, 80 Esplanade Road, Bombay.") One of these books, acquired ostensibly in "May 1926,"²¹ was *The Cost of A New World*, by Kenneth MacLennan, a top administrator in the Protestant missionary movement.²² It offers a

21. I have found no other evidence for his use of the name "Coomaraappa" until 1928 (in New York). If he did not mistakenly write "1926" for "1928," then maybe he wrote first the date of his acquisition and only later his name and address.

22. A "World Missionary Council" at Edinburgh in 1910 established a "Continuation Committee" with MacLennan and J. H. Oldham as its executive secretaries. MacLennan wrote its annual reports (see *GCM*, 198-99). Hogg's history of the International Missionary Council (in effect the post-war successor to the Continuation Committee) refers often to MacLennan (who after 1920 worked for the closely affiliated Conference of Missionary Societies in Great Britain and Ireland) and praises him as a "superb executive" (*HEF*, 199); and according to Oldham's obituary of him, "Without Kenneth MacLennan the ecumenical movement would not have developed in the way that it has ...[because] the example and achievement of the International Missionary Council

view of history very different from the one Joseph had been taught at Doveton College.²³ Here are the first three of the sentences that he marked out:²⁴

"England has scant regard either for religion or humanity.... Along the African coast, the man stealer, not the missionary, was the representative for generations of British interest in the native.... Exploitation went on merrily."

The passages he marked out in the other book (*HEI*) are mostly in the following vein:²⁴

"It is not good for the virility of any people to be too long in political subjection." [29] "The ... Rowlett Act ... was passed [in 1919] with a practically unanimous India against it.... To the Indian peoples ... it seemed an insult." [45] "'It is in the fitness of things,' writes Tagore, 'that Mahatma Gandhi, frail in body and devoid of all material resources, should call up the immense powers of the meek.'" [66] "Since 1919, Britain has lost ... India's trust and confidence. This distrust was formerly confined to the intellectuals, but today it has spread through the whole of the population ... [because of Britain's] failure to fulfil the promises made in the stress of the war when she needed help." [108-9] "[She] has begun the exploitation of India's vast mineral resources." [153] "The failure to deal adequately with national education cannot but be laid at the door of authority.... At the end of a hundred years of British rule there is hardly any appreciable improvement in the economic condition of India's sixty million outcasts." [154] "India's economic expansion has been severely limited by consideration for British interests.... India has been developed principally as a feeder for English markets and a market for English manufacturers." [155-56] "The competition of Lancashire machine-made cotton was allowed to kill India's cottage industry. No great imagination is required to picture the mass of suffering and poverty which followed.... But for the government of India to have any other aim than India's welfare, or to be deflected by the competing interests of the ruling race, is to be guilty of treason against the nation committed to its trust." [158]

Seligman and Davenport

Joseph's most important teachers at Columbia were Edwin R. A. Seligman (1861-1939) and Herbert J. Davenport (1861-1931).

Davenport taught mainly at Cornell University, but also in the summer sessions at Columbia from 1921 to 1928. The next year he retired — and a celebratory document was issued (at Cornell) which said of his teaching:

"Formal lecturing he disdained; with his students he trod the more congenial path of coöperative search for truth.... His classroom was the arena for conflict of ideas, and

were important factors in creating the confidence that made the formation of the World Council of Churches possible." (*IRM*, 351)

23. See p. 4.

24. Additional passages are given in Appendix 1.

the teacher's approval went not to the one who agreed with him but to the one who had wrestled well or even successfully against the elder thinker. His power as a teacher was increased by his rugged, forceful personality, his kindly interest in all his students, [and] his deep enthusiasm for his own theories, his conviction of their abiding importance and of society's need of them for its salvation."

In Davenport's textbooks (*DOT*, *DOE*) a Socratic approach to teaching is displayed in the sets of provocative questions in each chapter.²⁵ The following is a scattered sampling of some of the less technical questions:

"Do you know anyone who has more wealth than he needs? Than he thinks he needs? Is either condition likely ever to become common? What is the practical limit to consumption? Is food wealth? Are intellectual acquirements wealth? On what does the raising of a good crop depend? Mention such necessary conditions as you can to the prosperity of a great silk factory. Describe the social conditions necessary to [it] ... in (a) public tastes, (b) transportation, (c) machinery and mechanical skill, (d) motive power, (e) social security and morality, (f) laws, (g) international relations. What do we mean when we say that coal has been produced? What do you expect to do for a living? Why not something else? If a hundred-dollar bill were given to you, would this increase the total wealth of the world? Would it increase your wealth? Suppose each man's cash were increased by one hundred dollars, would this increase the wealth of the world?"

Davenport liked to make sharp points; the following one²⁶ was ahead of its time in the development of supply-and-demand economic theory:

"Note that this way of formulating the price problem [i.e. by positing that the market price of any one commodity is determined by the demand for and the supply of it and is the equating point between them] concerns itself with only one commodity at a time. Prices are [thus] tacitly [and unrealistically] taken for granted as already fixed for all other lines of production."

25. *DOE*, though "highly technical" (*SMC*, 633), is garnished also with provocative citations from other writers, starting with Tennyson's "Flower in the Crannied Wall" and including: "Neither excise nor customs make a substantial revenue, unless they attack the consumption of the poor"; "It is easier for a dense than for a sparse population to have ... a public opinion which restrains by the general sentiment of social interest the excesses of individual interest"; and (from Benjamin Franklin): "Our eyes, although very useful, require nothing more for themselves than a pair of spectacles, an outlay which ought not greatly to disarrange our finances; it is the eyes of others that ruin us. If all the world were blind excepting myself, I should have need neither of fine raiment, nor of palaces, nor of extravagant furnishings." Topics discussed include not only wealth, value, production, etc. but also coöperation and profit-sharing, the apprentice system, the eight-hour day, child-labor, sweatshops and unemployment.

26. I cite this example because it seems to me that the following observation of 1967 (*GNI*, 179) is valid still today: "For thousands of reluctant scholars, a few distantly remem-

He was well known, among academic economists and some businessmen, for the following sentence in his *The Economics of Enterprise*:

"All labor, therefore, that commands a price, though it be the poisoning of a neighbor's cow or the shooting of an upright judge, all durable goods commanding a rent or affording a valuable service — lands, machines, burglars' jimmies, houses, pianos, freight cars, passenger cars, pleasure boats — all patents, privileges, claims, franchises, monopolies, tax-farming contracts, that bring an income, all advertising, lying, earning, finding, begging, picking, or stealing that achieve a reward in price or a return that is worth a price — are productive by the supreme and ultimate test of private gain." (*DEA*, III, 382)

But he was not simple-minded, just idiosyncratically proto-radical.²⁷ He had a broader background than most economists. He had studied at Harvard Law School and practiced law, lost a fortune in real-estate speculation in South Dakota, been the principal of a secondary school there, and studied economics in Leipzig (briefly) and Paris as well as in the USA. He co-authored a book entitled "The Principles of Grammar, An Introduction to the Study of the Laws of Language by the Inductive Method." He was a close friend of his former teacher Thorstein Veblen²⁸ (who coined the term "conspicuous consumption") and drafted — but never published — essays on "economics of feminism" and "economics of fashion," in which the ideas are said to resemble those of Veblen's classic *Theory of the Leisure Class*. He was iconoclastic — he disbelieved in the "invisible hand" (an idea pivotal to orthodox economic thought), he found Alfred Marshall (in those days the most eminent economist in the English-speaking world) muddle-headed (*DEM*),²⁹ and a prominent American colleague accused him of "indiscriminate denunciation ... well nigh to the length of radical communism" — and yet he served in 1920 as president of the American Economic Association. When he died its journal commented, in a long obituary notice:



bered curves depicting the interaction of supply and demand to establish prices have for long been the only permanent return on an investment in economic education."

27. Paul Samuelson, the first American recipient of the Nobel Memorial Prize in Economic Science, concluded his acceptance speech (*SCP*, III, 16) as follows: "H. J. Davenport once said, 'There is no reason why theoretical economics should be a monopoly of the reactionaries.' All my life I have tried to take this warning to heart, and I dare call it to your favorable attention."

28. Veblen is discussed briefly on pp. 77-79.

29. See *SCP*, III, 22-26 for Samuelson's similar opinion.

"One must, in justice, say that his reformist tendencies were passive, repressed by his dominant intellectualism, and weakened by an underlying cynicism concerning the race of meh, public men and rich men in particular." {AER XXI/i, 699}

Joseph took Davenport's course entitled "Economic Theory." The focus was to be on "the pecuniary organization and control of modern economic society." *The Economics of Enterprise* was required reading. The following account (from one of Kumarappa's official biographies) of the seminar and its consequences is due nearly word-for-word to Kumarappa himself:

"The purpose of production, [Davenport] held, was the increase of [private] purchasing power! ... We were not to apply to it any moral values or social considerations.... A great deal of the discussion at the seminar was carried on between Kumarappa and the professor.... Kumarappa's arguments made [Davenport] red in the face ... [but Davenport graded] him at the end of the term... A+.... From this time onwards, Kumarappa was pretty clear in his mind that man is not merely a wealth-producing agent but essentially a member of society with political, social, moral, and spiritual responsibilities.... [So he] lost [his own] interest in making money.... [When someone later complimented Gandhi] on the wonderful training he had given Kumarappa, Gandhiji³⁰ replied, 'I have not trained Kumarappa, he came to me ready-made.' If the truth were known, he could have well remarked, 'He came to me "Davenport-made"!' " {VKQ, 11-12}

Vestiges of Davenport's use of language are apparent in Kumarappa's names for three of the five aspects of socio-economic life which he later distinguished.³¹ Davenport distinguished between (a) "primary distribution" due to the production of goods and services, and (b) redistribution due to "predation or parasitism" e.g. rigging the stock market. Kumarappa labeled the first three of his five categories predatory, parasitic and (positively) enterprising.

Joseph's main teacher, however, was Seligman. He was more eminent than Davenport. He had co-founded in 1885 the American Economic Association and was internationally regarded as a leading expert on public finance. His influence was largely responsible for the policies in the USA of taxing corporations' net profits and of having the rich pay a larger percent of their inheritance and personal income than the poor.³² (His own

30. The suffix "-ji" is an everyday honorific.

31. See pp. 39-42.

32. SHA, 945-46: "Leading academic authorities ... began to espouse ... a policy that went beyond taxing for revenue and aimed at taxing in order to change ('correct') income distribution. Adolf Wagner [Seligman's professor in Berlin] for Germany and A. C. Pigou for England may serve as examples.... The principle of 'ability to pay' and a 'social theory of taxation'... began to make converts.... Seligman's *Progressive Taxation in Theory and Practice* (2nd ed., 1908) must stand for a large body of literature

family was very rich; his father and elder brother headed a major bank.) He was active in politics. He had been instrumental in bringing to an end in 1901 the notoriously corrupt "Tammany Hall" municipal administration in New York City; he was co-author of the Progressive Party's political platform in 1912 in New York State; from 1911 to 1914 he served as chairman of the National League on Urban Conditions among Negroes (the Urban League); and his defence in 1921 of the Amalgamated Clothing Workers' Union was an important episode in the history of collective bargaining in the USA. Back in 1898 he had been the first eminent American to advocate a living wage for workers. He had served from 1908 to 1921 as president of the Society for Ethical Culture,³³ which in those days was the strongest American NGO in the social-work movement; he had supported (as president of the Association for the Protection of the Adirondacks) the forest-conservation movement; he had been president of the American Association of University Professors and had chaired its committee which established the principle of tenure with academic freedom; and so on.



Fifteen years before Joseph came to Columbia, another Indian student, Bhimrao Ambedkar,³⁴ had arrived there:

"One professor that [Ambedkar] was enamoured of was ... Seligman, [whom he] ran after ... from class to class with his [Seligman's] special permission to attend.... Ambedkar obtained his M.A. degree in 1915 (see AWS VI, 1-48) ... [and in 1916 his D.Phil. for] 'National Dividend of India — A Historic and Analytical Study.' ... An extension of this thesis [was later published as] ... *The Evolution of Provincial Finance in British India* {API}, ... with an introduction [i.e. a foreword] by ... Seligman." {KAL, 26-27}

Joseph expected to write his thesis on Bombay municipal finance, but Seligman, impressed by an account in *The New York Times* of a talk entitled "Why Then is India Poor?" which Joseph gave on 18 November at Community Church, persuaded him to write instead on public finance in India as a cause of her poverty.³⁵ Joseph attended meanwhile Seligman's

in all countries." According to SMC, 620, Seligman's "distinguished career... raised [public finance] to the front rank of economic specialities."

33. Gandhi in 1907 translated most of a book {SER} of 1889 by the leader of the Chicago Society for Ethical Culture; the resulting text is considered so essentially Gandhian that it is placed first among the "basic works" comprising Volume IV in the six-volume edition of selected works of Gandhi issued by his publisher, Navajivan Press.

34. See note 239.

(35. See p. 16.)

two main lecture-series, taking 94 pages of notes and studying mimeographed volumes³⁶ (prepared by an enterprising stenographer) of their texts the previous term. The lectures were on the following subjects:

1. "Public Finance," treating different kinds of public revenues (i.e. from public domain and public property, public works or industrial undertakings, fees and special assessments), general theories and principles of taxation, incidence of taxation, "newer social theories" of taxation, the application of general principles in actual systems of taxation, practical American problems of federal, state and local taxation, classes of public expenditure and the fiscal principles governing them, public debt, methods of borrowing, redemption etc., fiscal organization of the state, and national, state and local budgets.
2. "History of Economics" (including relations between economic theories and contemporaneous socio-economic organization³⁷):
 - Antiquity and the "oriental nations." In the stenographic notes for the 1927-28 lectures, there is a page on India (including a paragraph on Kautilya), a page on China (mostly on Confucius, "who first advanced the theory of *laissez faire*" and yet who said that "the real wealth of the state does not consist in pecuniary profits, but in justice"), three pages on ancient Jewish thought, 13½ on Greek and 4½ on Roman).
 - Medieval European thought (16 pp.); Mercantilists (16½ pp.); Physiocrats (7 pp.); English precursors of Adam Smith (8 pp.).
 - Adam Smith (11 pp.); British writers between Smith and Malthus (8½ pp.); Malthus (12 pp.); Ricardo (15 pp.) and the "Ricardian School" (13½ pp.).
 - British "opposition to the orthodox school" (7 pp., including: "What Carlyle tried to do was carried on by a still less logical individual who represented the sentimentalist, or emotional side. This was Ruskin.").

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35. Seligman himself had published in 1900 an article on the French colonial fiscal system and had concluded that except in Cochin-China, "the sums raised in the [French] colonies ... are in fact spent for purposes which redound to the interests of the colonies themselves" (SSP, 283).

In a letter of recommendation dated 29 January 1929, Seligman said that Joseph as a student had "done excellent work in the general field of economics" and that his thesis was "an unusually able essay."

36. He made proof-reading corrections and comments in the margins.
37. The following point is made at the outset (SLH, 1): "In the pure sciences one can deal with phenomena the repetition of which can be accurately expected, and through repeated experiments one can confidently express opinions. But social science ... [deals] with mutable things.... A man, a society changes. Exact repetition of phenomena is therefore not to be expected. As human beings live the system lives and the system changes. An individual investigator is necessarily influenced in such a science by his environment ... and above all by the institutions of his own age and his own country." This reverberates with Alfred Marshall's precept (see p. 74) that every change in social conditions is likely to require a new development of economic doctrines.

—"Continental European" developments to 1870 (8 pp. on France, 4½ on Germany); "Development in America" (5½ pp.).

—"Recent developments" (11½ pp.). Having discussed Malthus, Ricardo *et al.* so thoroughly, Seligman was now short of time. This part consists of 1½ pp. on the German "founders of the historical school" (the *Kathedersozialisten*); 2½ on "scientific Socialism" (including Marx) and 7½ on Jevons, Cairnes, Menger, Walras, Edgeworth, Marshall *et al.*

Seligman had studied at German and French universities (in Heidelberg with Karl Knies,³⁸ in Berlin with Adolf Wagner;³⁹ in Paris at the Sorbonne and the École Libre des Sciences Politiques) as well as at Columbia, and had assembled his own vast library (said to have contained some 20,000 volumes) on the history of economic thought. His expertise in this regard was genuine and his lectures were so magisterially well informed that Kumarappa would never thereafter be intimidated by neo-orthodox or Marxist ideological propaganda. The stenographic lecture-notes show, however, that Seligman was rather dismissive of Pigou:⁴⁰

"[He] is a remarkable man of ability in mathematics, not much interested in practical affairs, yet ... much impressed by the modern social problems and the needs for change. His contributions are familiar to you all.... [He has] not gone to the bottom of some methods of great problems when [dealing] with particular problems. Perhaps [the] chief indictment we can make is that he is too sudden. He presents all the niceties on each side of the question and leaves you perhaps in doubt as to what his conclusions are.... [So] he has exerted less influence in other countries than his talent would let him."

—and this may be why Kumarappa never took Pigou seriously enough to cite him or even to recommend to Nehru the use of Pigouvian taxes as an instrument for encouraging ecologically sound industrial practices.

Seligman believed, like the German professors with whom he had studied, that people in their economic activities have a "multiplicity of motives which cannot be jumbled together in the phrase 'desire for wealth'";⁴¹ yet some of his experiences in social work convinced him that "with human nature as it still is found in the ordinary man, coöperation is even less than

38. An "elder statesman" among the *Kathedersozialisten* (see p. 61) and "a great teacher" (SHA, 850). For example, his history of economic thought includes citations showing that Adam Smith, notwithstanding his own concept of the "invisible hand" (see note 142), knew of some ways in which landowners and merchants serving their private interests often diminish aggregate wealth (KPÖ, III, 3).

39. "A leader in the fight for *Sozialpolitik*" (SHA, 851).

40. On Pigou see pp. 80-81.

41. This refers of course to the first premiss in the list on pp. 58-59.

profit-sharing a social panacea or an immediately practicable means of escape from modern industrial evils" {SPE, 446}. According to the leading modern historian of economic thought in the USA, "In policy as in analysis [he] moved just ahead of the prevailing doctrines, along positions that accorded with those of the enlightened business community" {DEA, 267}. It would be unfair to call him superficial, however. An essay of his (which Kumarappa read⁴²) on the economic causes of the World War I includes remarks in the following vein:

"Free trade and universal peace were obviously the means best calculated to perpetuate [Britain's] industrial monopoly, [so] we find [her, in the late 19th-century,...] desirous of living in amity with all those countries which had formerly been her rivals, but which were now hopelessly [out]distanced in the industrial race and which were henceforth to be regarded as the most desirable markets for the output of British factories." {SEE, 167}

"If the growth of national wealth depends upon the tempo of the accumulation of national profits, and if the rate of profit is, as we have seen, far greater in the application of capital to industrially undeveloped countries, [then] the [current] struggle for control of the international industrial market is even more important than was the previous competition for the commercial market." {SEE, 169}

"If the modern age is essentially a capitalist age, why should we not, in the face of the international aspects of capitalism, have a growth of internationalism rather than of nationalism?" {SEE, 164}

When Seligman died, Columbia University's Faculty of Political Science said in a commemorative document that "no member of the university... contributed more as ... counsellor to its work." He was probably instrumental in bringing to the economics faculty in 1920 a man, Rex Tugwell, who after being promoted gradually to a full professorship in 1931, was

42. See p. 29. (However, I have taken these citations from EKF, 256-57.)

43. See pp. 77-79. In the university's 1929 commemoration address Seligman discussed four kinds of freedom. It may be of interest to compare his list with Roosevelt's more famous one of 1941:

Seligman:	Roosevelt:
freedom from fear	freedom from fear
" " ignorance	" of speech and expression
" " intolerance	" to worship God in one's own way
" " outworn traditions	" from want

Amartya Sen has elaborated {SDF} a better list: "internal" freedoms (freedom, underpinned by education, to be creative and to reason lucidly and articulately); "participatory" freedoms (democracy, political liberty, a society based on public discussion); "transactional" freedoms (to engage in economic exchanges); "procedural" freedoms

instrumental in forming the economic policies of Franklin Roosevelt's "New Deal";⁴³ Seligman may thus be regarded as having been to some extent an historical link between the *Kathedersozialisten* and the North American version of the welfare state.⁴⁴

Kumarappa's first book

Kumarappa's thesis was entitled "The Contribution of Public Finance to the Present Economic State of India." The text was published in a series of articles in 1929 and '30 in Gandhi's journal, *Young India*, and then again in 1930 (with a preface by Gandhi) as a book in five versions, i.e. in English and four other languages. The English title was now "Public Finance and Our Poverty."⁴⁵

An introductory chapter on "general prerequisites for the building up of a wealthy nation" sets out various precepts (not observed by the British in India) for how public finance can promote its welfare. The second sentence of the following passage shows that Kumarappa, though already anti-imperialist, did not yet take a dim view of factories:

Government should husband the natural resources of the land, as short-sighted private ownership might waste and exhaust them in a brief period.... During transitional periods when nations pass from one stage to another — agricultural to industrial, handicraft to factory system — an efficient Government should guide the economic activities of the people into proper channels ... by wise expenditure on experimentation, and dissemination of information so obtained, [and by] ... tariffs ... bounties ... [and] subsidies [promoting] ... a well-balanced proportion of various kinds of activities for the common people. The well-being of a nation does not depend on the monetary affluence of a few, nor on unlimited opportunities afforded to all by any one field of occupation.... When we judge the profitableness of a government policy, our criterion should be the provision of opportunities to all those who are willing to contribute their share of work and thought to the common good of the nation, that they may be able to do so freely with

(financial regularity and the absence of corruption, of arbitrary discrimination and of inequality of treatment); "protective" freedom (a safety net for the weak).

44. SPO is about its 19th- and early 20th-century political origins within the USA. The account in MWS of the gradual development of the British welfare state (and of its French counterpart) pays due attention to influence of the *Kathedersozialisten*.

45. He sent a copy to Seligman, who responded, "My dear Kumarappa: - I was glad to receive your letter and also the copy of your book which interested me very much. I am pleased to see that you are keeping up your interest in economic matters and I hope that you will write to me from time to time." I wonder whether Seligman realized that except for its title the text of the book was identical to that of the thesis.

neither let nor hindrance.... The incidence of taxation⁴⁶ should be carefully considered, and the burden should be according to faculty.... The administration itself should be... [such] as the nation can afford to maintain.... The salaries of its public servants should be tied up to a [moderate] multiple of the average income of a citizen for comparison."

This discussion is framed by some general precepts cited from Ruskin ("There is no wealth but life"⁴⁷) and Hobson⁴⁸ (on "substituting for the monetary standard of wealth a standard of human well-being") and from Indian authorities:

"To use Kautilya's figure of speech,⁴⁹ taxes should be obtained as the fruit is plucked when ripe without injury to the plant.... To again borrow an ancient Hindu figure of speech, the State should not be like a charcoal dealer who cuts down the trees, burns them, and obtains a profit at the cost of the destruction of the source of revenue, but it should be like the florist who merely gathers the flowers which would otherwise fade, leaving the plant to bloom again."

Then follow two chapters, contrasting with each other, on "conditions prevailing in India" around 1800 (before British hegemony) and around 1900 (a few decades after Victoria became Empress of India). The first of these includes a paragraph⁵⁰ on occasional local famines due to the irregularity of the monsoon, but depicts an otherwise remarkably prosperous society, mentioning "the beautiful buildings and canals as well as the public trunk roads, constructed during this period and existing to this day," and a long-standing "drain of gold" to India because of her admirable manufactured goods sold in the West (and shipped there often in vessels made in India), and with supporting testimony from a half-dozen Western sources of that era.⁵¹ Kumarappa says that notwithstanding "a certain amount of looting by predatory armies, ...farming was looked upon as sacred, and warring princes scrupulously avoided any destruction or damage to agricultural property," that the proceeds of taxation were "spent in the land," that "each village had its own school supported by land grants," and that:

"Although the tax rates appeared high, the human element and the personal touch in the government often led to bargaining and relief. The tax itself was based on produce

46. See p. 16 and SS7.

47. See p. 97.

48. See p. 60.

49. Kautilya was the chief minister of the emperor Chandragupta (late 4th century BCE) and has been thought to have written the oldest parts of the classical Indian treatise on statecraft, the *Artha Shastra*. It discusses in some detail taxes on agriculture etc.

50. See p. 120 for a citation of this paragraph.

51. *ATC* ii supplies further such eye-witness evidence. (And, Whitman's poem "Passage to India" (1871) still described her as the "most populous, wealthiest of earth's lands.")

and so was proportionate [and] an option to pay the tax either in kind or in money was extended to the farmers."⁵²

The corresponding chapter on India a century later begins with five first-hand accounts by Western visitors of the abject poverty of her "brave, honest, hard-working, economical people"⁵³ and an account of some of the details: regressive taxation, a "well-developed network of railways, but comparatively little spent on canals and irrigation," more and bigger famines, the disappearance of the former system of national education, the reversal of foreign trade from export to import of manufactured articles and export of raw materials, and the disappearance of Indian shipping and ship-building, and of her cottage industries:

"The old-time skilled craftsmen and artisans have lost their trade, and no industry has replaced them, but these men have been driven to the land to eke out a precarious living.... Part of the year they work, but when the dry season sets in, they are let idle."⁵⁴

Kumarappa then argues that since the conditions which affect a nation's welfare may be divided into (1) those inherent in man and (2) those due to environment (a) natural and (b) artificial, and since India's natural environment is rich in resources and since, as the current British prime minister himself had remarked, her people were "the most industrious in

52. According to a leading Western historian of modern India, "Earlier regimes [i.e. before the British one] had always regarded land revenue as a tax that varied in accordance with good or bad harvests. By turning this tax into a contractual rent to be paid to the government regardless of such vagaries and enforcing this demand with the rigor of British law, the [British East India] Company had created the necessary conditions for its symbiosis with the agrarian state. Much of the silver pumped into India earlier was now ... transferred abroad. This caused a severe deflation in India, where money was now scarce and prices remained depressed throughout the first half of the 19th century.... Whenever the revenue assessment was enhanced, this meant a further reduction in the buying power of the peasantry....

"Under such conditions of exploitation, deflation, depressed prices and reduced buying power, the parasitical Company could live on its paralysed host for some time, but there were no prospects for economic growth.... By 1840 most provinces had been subjected to British rule.... The fact that the British moved in as heir to regimes that had put up a fierce and costly resistance to them meant that they also inherited a revenue demand that was [already] pitched very high." {*REH*, 21}

(For a mid-19th-century analysis along roughly similar lines, see *MEC* XII, 215. *RLT* and *CHP*, 175-179 are also good on this topic. For contrary arguments see *REI* and *MSF*.)

53. This phrase is from a citation (in *DPI*) from Dr. Josiah Oldfield, a leading British vegetarian and a friend of Gandhi's in his student days in London in the 1880s.

54. See pp. 105-06 for Gandhi's corresponding argument a year later.

the world, [and] much of their land ... fertile," therefore the cause of her poverty was the (British) government.

This charge is then detailed in chapters on public expenditures (with sub-headings for civil administration — "about five times as expensive as in the US" — and capital expenditure), public revenue (with subheadings for customs, income tax, the salt tax, land revenue, excise, forests, railways, irrigation, and interest), and (in the second edition of the book) public debts. These chapters and a set of appendices include statistical tables comparing India with other nations (e.g. that 94% of the Indian government's budget was being spent on debts and military and administrative expenses, as against 49% of the federal budget in the USA).⁵⁵ A summarizing chapter observes:

"Perhaps owing to ... the cost of wars when the Moghul Empire [in India] came tottering down, and to the tyranny of the last of the Great Moghuls, taxation was heavy in India [in the 18th century].... With the added rigor of organization and strict administration, these same taxes [when levied by the British]... brought in considerably more revenues than they did under the Moghuls. It was not a 'trusteeship' then, but a mere, honest business proposition of exploitation.... This provided the British with the millions that were necessary to capitalize on the advantages of inventions of steam power etc., and in a large measure gave the lead to the 'Industrial Revolution' of Europe.... [But meanwhile in India] the stagnation in economic activity at the time of the fall of the Moghul Empire was followed by a rapid retrogression....

"In the main, the exploitation policy of the East India Company was continued when [in 1858] the British Crown assumed responsibility for India, although it was no longer a barefaced commercial concern but was heralded by high-sounding trumpets of Divine Ordinance....

"The per-capita income⁵⁶ was computed under government direction as follows:... 1881, Rs. 27 per annum; ...1921, Rs. 74.... It looks like progress, but ... when we reduce these according to the price index for the respective years of 100 ... and 378, we get the incomes ... as Rs. 27... and 19.6.

"...There is a further loss due to a lack of full return for value. One of the greatest benefits that a nation reaps from its expenditures is the immeasurable advantage it derives from the accumulation of experience and wisdom by its administrators who, after their period of active life, retire into the councils of the nation to aid and guide the next generation. The British civilian gains experience and the Indian taxpayer pays for it, but when mature, the civilian retires to Great Britain and India loses the advantage of the wisdom it has paid for, and that loss again is Britain's gain. Who can say how much Britain owes her present leadership in the political world to the wider range of viewpoint provided by her sons who were trained in India?"⁵⁷

55. This was the most salient statistic for Gandhi (GW XLII, 222).

56. Kumarappa later had occasion to report his own findings as to per-capita income in Indian villages; see pp. 22, 24 and 38. (57. See next page.)

WORKING WITH GANDHI

In 1929 Kumarappa met Gandhi,⁵⁸ began to change his way of life⁵⁹ and undertook at Gandhi's request an economic survey of a rural area in Gandhi's native province of Gujarat.⁶⁰ The result of the survey was a book (KST) with statistics compiled from thousands of detailed interviews in some fifty villages. The chapters are entitled: "Crops and Cultivation" (with 14 subtopics: "Crops Raised", "Unit of Cultivation" etc.); "Manure" (with 13 subtopics); "Irrigation" (including "Tanks", "Wells", "Canals" etc.); "Marketing" (including "Transport", "Brokerage" etc.); "Industries";⁶¹

57. The point of this last paragraph seems derived at least indirectly from Dadabhai Naoroji (see pp. 63-64), who often touched on this theme, as in the following passage: "Europeans occupy almost all the higher places in every department of Government.... While in India they acquire India's money, experience and wisdom; and when they go, they carry both away with them, leaving India so much poorer in material and moral wealth. Thus India is left without ... those elders in wisdom and experience who in every country are the natural guides of the rising generations in their national and social conduct" (NPI, 5-6). Kumarappa did not cite Naoroji, however, but only (at various places) R. C. Dutt's books that are referred to here on pp. 64-65.

58. This was on May 9th (VRE, xvi). While awaiting the appointment, Kumarappa watched a half-naked old man who was seated on a clay floor outdoors and spinning cotton. After a few minutes the old man asked him if he was Kumarappa; he said yes and, realizing that this was Gandhi, courteously joined (in his silk trousers) in sitting on the clay floor. (VKQ, 14-15)

59. In later years he would laugh at himself for having asked his Bombay tailor to measure him for a loin-cloth (VKQ, 21).

Gandhi had him paid a relatively high salary at first; Gandhi's grandson asked why; the reply was: "I need him." The young man asked, "Would we [your grandchildren] have been more useful if we had studied?"; so, Gandhi allowed his grandchildren to receive higher formal education (PLP, 105) even though he had forbidden his own eldest son to do so. That son, consumed by bitterness, had become a derelict (see PLJ).

Kumarappa later did his Gandhian work for a modest maintenance with no salary. He did not marry.

60. When Gandhi returned to India in 1915 (after working mainly in South Africa for more than twenty years), his home base until 1930 was in Gujarat, and he founded a university there (see GujaratVidyapith.org) in 1920. Kumarappa was not fluent in Gujarati, so the interviews for the survey were conducted by a team which included nine students from the university, two of whom then helped for a year to tabulate the statistics. Gandhi began to read Kumarappa's book on 19 January 1932 and completed it the next day (GCW XLIX, 507-08). For an account of a re-survey 35 years later, see SSR.

61. This covers spinning, weaving, dyeing, rice and flour mills, oil mills, sugar crushing, gum collecting, dairies, carpentry, blacksmithy, pottery, etc.; also "the system of payment in kind to the artisans" and the "tools and methods of work of these artisans."

"Finances"; "Land Revenue"; "Indebtedness"; "Hygiene and Health"; "Cattle"; "Miscellaneous"; and "Conclusion." According to this last:

"A general computation of the national income ... in 1881 gave the figure of Rs. 27 per annum [per capita]....⁶² Even without allowing for rise in prices, the income of the people of this taluka [district] is only half [that amount].... The discrepancy between the [current] Government calculation and ours will be accounted for largely by the fact that our average is arrived at purely from the income of village people, while the Government calculation brings into account the income of millionaires as well....

"The bulk of the families are unoccupied during a large part of the year.... What we need are subsidiary industries that the worker in the field can engage in at odd moments, without such occupation interfering with his main source of income."

An eight-page recapitulation at the end of this chapter gives 45 "extracts of suggestions and recommendations from the preceding chapters." Some of them are:

"Waste lands should be given for cultivation free of taxation till such areas become profitable."

"Where lands belonging to the Irrigation Department are not capable of being used as reservoirs for water, such lands should be returned to the cultivators."

"One of the main efforts should be to improve seeds by a process of selection and experimentation."

"If the level of subsoil water could be raised by conserving the water..., brackishness would be diluted."

"Brick- and tile-making [should] be encouraged rather than [the importing] of zinc sheets."

"To lower the rate of interest⁶³ it is necessary to have an organization which will draw surplus capital from the cities and make it available to the farmers."

"It may be possible to avoid borrowing for payment of land revenue by taking payment of tax in kind, although this will throw an additional burden on the administration.... [And, we should] salvage the old system of payment [in kind] to artisans."⁶⁴

"If some duty, such as teaching in primary schools, were added to the ordinary duties of [the Brahmins'] calling, something may then be said in justification of the burden they throw on the village."

62. Kumarappa had used this statistic in his university thesis; see p. 22.

63. According to an American observer in 1949, "The baniya caste — the moneylenders — form a powerful social institution.... Baniyas lend money at ... rates up to 20% a month." {*BWL*, caption to the tenth photograph after p. 150}

64. Later he wrote an essay {*KBA*} developing these ideas. See pp. 35-36 for citations.

A chapter on indebtedness includes the following remark mitigating the Gandhian tendency to concentrate on bare necessities:⁶⁵

"Any occupation worthy of consideration will have to provide not only the mere necessities of existence, such as food, clothing and shelter, but also a certain amount for the education of children, recreation and social functions."

The survey had found that obligatory "social expenses" were mainly for weddings and funerals. By not urging that less be spent on weddings, Kumarappa was implicitly disagreeing with Gandhi's view of the matter.

The chapter on land revenue includes the following data:

"In [the village of] Matar, we examined 257 cases of sale transfers of land. The average price per acre is The average [annual tax] assessment per acre is This means that the peasant is called upon to pay 3.9% of the capital value of his property by way of annual tax. In Traj, where we examined 239 sale transfers of land, the average price per acre is , the average assessment being per acre, [i.e.] 4.2% of the capital value.... As instances of extreme cases, we refer to Pinglaj and Pansoli, where the [annual] land revenue [exacted by the colonial government] works out to 33.2% and 27% respectively of the capital value of [the] land.

"...The [agricultural] yield per acre is in many instances hardly sufficient to meet the revenue. In Limbasi, 71.4% of the net yield has to be paid over as land revenue. And in Chikhalia it amounts to 80.3%.... In Valotri, while the average net yield per acre is , the average assessment is , which represents an assessment of 176.5% on the net yield. Similarly in Traj, 215.4% and in Khadiapur 203.1% and in Undhela 194.3% have to be paid over. That is, in simple language, the farmer has to pay to the government twice what he gets from his fields."

From May 1930 Kumarappa was engaged in editing Gandhi's weekly, *Young India* {*GCW* XLV, 283; XLVII, 373}, while Gandhi was in jail. Kumarappa had written for the journal before and, in a letter of April (1930) which was reprinted there, had asked his fellow Christians — including the Bishop of Calcutta, who declined his request — to condemn the current use of torture against people who were symbolically "producing" salt without paying the tax. (By the end of the year, as many as 100,000 were jailed for doing so.) The journal's printing press was confiscated in June.

65. See p. 97 for Gandhi on weddings. During a famine in Orissa, he was asked if artists could "see truth in and through beauty," and replied: "Some may, but ... to the millions we cannot give that training to acquire a perception of beauty in such a way as to see truth in it. Show them truth first, and they will see beauty afterwards. Orissa haunts me in my waking hours and in my dreams. Whatever can be useful to those starving millions is beautiful to my mind. Let us give today first the vital things of life, and all the graces and ornaments of life will follow." {*GCW* XXV, 255-56}

After that, the mimeographed issues would each conclude with a "Weekly War News" report of arrests, convictions, beatings, deaths etc.

A Gandhian ethical outlook is apparent in Kumarappa's inaugural address in July (1930) at an exhibition of Indian products. After distinguishing between (a) nationalism leading to international hatred and (b) nationalism foregoing gains at the expense of other nations, he said:

"Trade should result in gains to both parties.... Any set of transactions which are not to such mutual advantage is not [ethical] trade but ... sharp practice⁶⁶ [which] we may liken ... to the actions of 'confidence trick' practitioners ... [who] pick out their victims and talk in terms of high ideals ... to enlist their confidence, and then cheat them."

He said that Britain had dealt with India in such a way by manipulating tariffs and that since India could not change them, "we have to control ourselves and be directed not by the price economy but by a mutual understanding" between (a) customers supporting home industries even at personal inconvenience and (b) manufacturers striving "to capture the [domestic] market by fair dealings and full measure":

"America's [economic] greatness lies in her internal trade..., unlike Britain which depends almost wholly on foreign trade. We have in our country all kinds ... of people and ... raw materials with which to manufacture all our requirements."

In a speech a few days later to the National Christian Party, he used a metaphor which was to become pivotal to all the arguments in his next book:⁶⁷

"We find two distinct types of nationalism manifesting themselves today. One we shall call 'Sheep-Flock or Herd-type Nationalism' and the other, 'Wolf-Pack Nationalism'." {KN, 1-2}

In November he told a gathering of students:

"One of the reasons why Western civilization has made little headway in our country... is that their culture is primarily urban while ours has been basically rural.⁶⁸ ...The great hold that Gandhiji has over the masses today is because he is a rural genius."

Jail and Bihar

In March 1931 Kumarappa was jailed but soon released after Gandhi and the viceroy made (on March 4th) a "friendship pact" preparatory to Gan-

66. This distinction complements the implicit one (see p. 41) between "healthy" and "un-healthy" competition.

67. See p. 36.

68. The idea may have come to him initially from Tagore. (See p. 10.)

dhi's visiting England in the autumn negotiations. Kumarappa was now appointed convener of an Indian National Congress committee on financial obligations between Britain and India. Its report distinguished between India's national debts "incurred justly and for the benefit of [her] people" and debts imposed unjustly by Britain. It reckoned the fiscal costs of the 1857 rebellion, the fiscal costs paid by India for "external wars" (i.e. elsewhere in the Empire), the costs of the capital redemption in 1874 of the British East India Company, and the costs of building railways in India, as well as interest payments on claims, miscellaneous charges (e.g. to maintain the Persian and Chinese consulates) and famine-relief charges.⁶⁹

Shortly before Gandhi left for London, Kumarappa described him (in an article {KGB} for a Bombay newspaper) as "a seer amongst economists" in India because he was not so "intoxicated with Western doctrines" as to assume that people there would act "in the same way as do Westerners":⁷⁰

"His attempt is not to ... increase consumption and [thereby] stimulate production, but to organize villages so as to enable them to be independent of the exploiter who casts greedy eyes on the little that a farmer is able to produce."

Whilst again engaged, during Gandhi's trip abroad, in editing *Young India*,⁷¹ he drew up a "synopsis for a course in economics" for Gandhian anti-imperial activists. He put under two headings — "general principles"

69. In May, Gandhi wrote to him in Bombay {GCW XLVI, 70}: "I hope your work is making steady progress. I would like your report to be a textbook on the subject." It is summarized in an appendix to the second English-language edition of *KPF*.

70. Kumarappa had studied sociology (see pp. 7-8); and Seligman had taught him (see note 37) that people in different cultures behave differently.

71. See GCW XLVII, 373-74. Some fellow Gandhians had complained about the tone of some of his previous writing in *Young India* (and Gandhi had replied wistfully that since Kumarappa was from a part of India where the cuisine is particularly spicy, "How can we get the pungency out of his system?" {VKQ, 23}). Gandhi arranged now for some other colleagues to rein Kumarappa in, and told him: "I would like you to make as little criticism as possible but give as many facts and figures as possible.... If you find time you can study the economics of drink and show ... what a tremendous waste the drink habit means apart from the actual money value of the drink consumed. You may also take up the whole subject of economic waste that goes on in our midst through preventable disease, through wrong feeding, [and] through the criminal waste of human excreta as manure.... Economics treated in this manner can really become fascinating ... and instructive for the masses.... [But] if you find that these are hints thrown out by a man who knows nothing about economics, you are at liberty to brush aside the whole of this paragraph."

and "economic conditions in India"—the topics to be covered. The "general principles" were:

- Factors of production (land, labor, capital, enterprise)
- Stages of industrial development
- Division of labor
- Business organization
- Marketing (assembling, storing, risk, sorting, transporting, distributing)
- Price (supply and demand, price-fixing, monopolies)
- Interest
- Currency and banking (e.g. standard money, fiduciary money, credit, the gold standard, international settlements)
- Distribution (wages for labor, profits for the entrepreneur, interest for the capitalist; marginal utility)
- Public-finance expenditures (for public utilities, defence, law and order, health, education etc., and to correct maldistribution⁷²)
- Government revenues
- Public debts

"Economic conditions in India" were to be sorted out as follows:

- The Indian people (their social organization, their ideals)
- Economic organization⁷³ (farmers, artisans, traders)
- Natural environment (including monsoons, rivers, coastal harbors, various minerals, and hills "covered with ... timber" and "capable of being used for generating electricity by hydraulic power")
- Artificial environment (including government, education, the banking system, railways and roads)
- Irrigation⁷⁴
- Public finance: revenues, debts and capital expenditures

He included a bibliography of twelve books available at that time in India: two each on elementary economic theory {FEE, CE} and public finance {PPF, KPF}, and four each on rural economics {KIR, KST, MLD, MLG} and the Indian economy {JBI, KIE, SEI, SEB}.

Perhaps he never taught the course. He was jailed in 1932, this time for nearly two years. In jail he read a variety of books and took notes on them, in three notebooks of which the first has apparently been lost.⁷⁵

72. Here again he was influenced by Seligman; see note 32.

73. Among the "present evils" which he intended to discuss was that "money-crops have ousted food crops and thus increased the danger of fluctuations due to speculation in international markets."

74. I would put this under "artificial environment."

75. It may be from the first incarceration and/or misplaced in the archive.

(The other two are numbered "2" and "3.") Apart from some books on non-economic topics (such as Bertrand Russell's *Marriage and Morals* and James Jeans's *The Universe Around Us*) the extant notebooks include 90 pages of notes on books by Seligman {SEE, SSP, SST}, and also:⁷⁶

- 31 pages on John Strachey's *The Coming Struggle for Power* (1932)
- 28 on Henry Carter Adams's *Public Debts. An Essay on the Science of Finance* (1888)
- 27 on Arthur Salter's *Recovery, The Second Effort* (1932)
- 23 on an anthology, *Red Economics* (1932), of reports, edited by Gerhard Dobbert
- 21 on Charles Whiting Baker's *Pathways Back to Prosperity* (1932)
- 20 on Silvio Gesell's *The Natural Economic Order* (1929)
- 17 on H. G. Wells's *The Work, Wealth and Happiness of Mankind* (1931)
- 10 on Hubert Blake's *World Disorder and Reconstruction* (1931)
- 9 on James Francis Horrabin's *An Outline of Economic Geography* (1923)
- 8 on *Finance and Commerce in Federal India* (1932), by a "British Indian"
- 8 on André Philip's *India: A Foreign View* (1932)
- 3 on Patrick Geddes's *Cities in Evolution* (1915)

He took from Wilfrid Scawen Blunt's *Secret History of the English Occupation of Egypt* the following part of a letter that Blunt wrote in India in 1879 as a guest of the viceroy:⁷⁷

"I have been studying the mysteries of Indian Finance under the 'best masters, government secretaries, commissioners and the rest, and have come to the conclusion that if we go on *developing* the country at the present rate the inhabitants will have, sooner or later, to resort to cannibalism, for there will be nothing but each other left to eat. I do not clearly understand why we English take their money from these starving Hindoos to make railroads for them which they don't want, and turnpike roads and jails and lunatic asylums ... and why we insist on their feeding, out of their wretched hand-fulls of rice, immense armies of policemen and magistrates and engineers. They want none of these things, and they want their rice very badly, as anybody can see by looking at their ribs."⁷⁸

Soon after leaving jail, Kumarappa was put in charge of the financial aspects of a private relief effort (making up for the absence of government action) in the aftermath of an earthquake in the province of Bihar. His bookkeeping there was incredibly careful⁷⁹ and his control of expenditures

76. More information about these books is given in the appendix.

77. Kumarappa in his first book had cited the same author's *India under Ripon*.

78. A latent recollection of this passage may have prompted Kumarappa's remark (more than twenty years later: see p. 121) about evaluating community-development programs by observing whether the poorest gained at last some flesh on their ribs.

79. Some of his techniques are described in *KOA*. The director of the program (who in

equally rigorous;⁸⁰ so Gandhi decided to make him the executive director⁸¹ of a new organization, the All-India Village Industries Association (AIVIA), which was duly founded in December 1934 {GCW LXVIII, 78}.⁸²

The AIVIA

The All-India Village Industries Association's headquarters were in central India in a small town (Wardha) where the rail line between Bombay and Calcutta crosses the one between Madras and New Delhi. Kumarappa now gave up altogether his Bombay residence, and in a talk on "the task before us" dwelt more than ever on differences between Western-style urban and traditional Indian rural cultures. He said:

"Our forefathers ... tried to grapple with problems ... similar to the ones that we are faced with.... We have evidence of this in such institutions as the joint family system,

1952 became the first president of India) later recalled how, when a 400-page list of donors from throughout India was published, "I appealed to the public to inform me if any names of donors had been omitted. I got about ten or twelve replies... [and in fact] the names were not exactly omitted, but printed under some other province or state." {SNK, 290-91}

80. The following account from his private papers is matched nearly word for word by a passage (in which Kumarappa is referred to as "he") in VKQ, 56-57: "The tendency amongst the Bihar people was to be extravagant... [so I] made a rule that the allowance for food of volunteers should not exceed three annas. I myself was eating in the volunteers' camp on this basis. It became a little embarrassing when Gandhiji with his entourage arrived, because Gandhiji's milk [and] fruit and the various requirements of his entourage ... would cost much more than the daily provision which we had made for the volunteers. [Also, I had] found that the cars for the relief work were being used very liberally by the workers; so I had a strict register kept... and... I suggested [sic] to Mahadebbhai [Mahadev Desai, Gandhi's personal secretary, who took to calling Kumarappa "Colonel Sahib"] that they should obtain their own supply of petrol... and [I] disallowed all Gandhiji's bills in regard to food or motor-car travel. When this was reported to Gandhiji he was a little puzzled and sent for me.... [I explained] to him my delicate position... checking the extravagance of thousands of volunteers.... Gandhiji appreciated my point and called Mahadebbhai and instructed him that not a pice was to be charged to the Bihar Relief [organization]."

81. The formal title was "Organizer and Secretary."

82. Gandhi had resigned in October from the Indian National Congress. Founding the AIVIA represented for him a shift from political to economic issues (though he maintained a strong — sometimes decisive — influence in the Congress). He lived close to the AIVIA headquarters until mid-1936 and then moved to his last ashram, in a village five miles away and inhabited mainly by "untouchables." The new ashram was "spartan even by Gandhi's standards" and was for him "an inexhaustible source of joy" (see BGP, 299).

[the] fragmentation of land and [the] caste system, which at present are noted for the evils that they have produced. [The] joint family system was a means of toning down competition [and] checking accumulation of wealth and extremes of poverty.... When land was the main source of wealth, [fragmented ownership] checked the most fertile lands being acquired by speculators. Each farmer possessed pieces of fertile soil, medium soil and bad soil, and if any farmer wished to dispose of the fertile soil, he had to obtain the consent of the rest of the village. Such conditions exist even to this day. Similarly the caste system prevents an onrush of competitive forces into what might be a paying occupation for the time being [only,] ... [whereas] the system of payment in kind to the artisans of the village ensured every man getting his minimum requirements.... These ... systems have no doubt operated in a way not contemplated by the originators, but nevertheless we cannot afford to ignore the useful functions they have performed." {KTB, 2-3}

The AIVIA's assigned tasks were to "raise funds, carry on research work, publish literature, organize propaganda, establish [local] agencies, [and] devise measures for the improvement of village tools." Its members pledged to "prefer the use of village manufactures", e.g. "khadi [hand-made cloth] in the place of mill cloth, village earthen pots instead of factory-made china, reed-pen instead of steel pen, hand-made paper..., wholesome *babul* or *neem* [thin twigs] or other such⁸³ toothbrush,... leather goods made in villages out of village-flayed cattle instead [of] tanned hide, the ordinary village *gur* [molasses] instead of factory sugar, hand-pounded whole rice..., etc." {GCW LX, 16}. Its agents were to disregard caste distinctions, to "seek the assistance and coöperation of all those who may be willing to give them," *not* to take part in civil-disobedience campaigns {GCW LXI, 453}, and not to be paid⁸⁴ for their rather demanding work:

"[Each local] agent will be expected to attend to the program already drawn up by the Central Office... [and then to] make a survey of all such industries as may be revived, improved or introduced in his area, and shall forthwith report to the Central Office results of his investigation and submit a program of work based thereon for examination by the Office. Every agent will be expected to attend to the sanitation and hygiene of the villages within his area. With a view to finding markets for the surplus products of the villages, he should induce reliable merchants to store village products for sale, at prices mutually fixed between the merchants and the agent.... He should carry on an intensive propaganda to create a favorable public opinion for the program in his area. He may invite and receive subscriptions and donations to meet the expenses in connection with his work and should not expect any financial aid from the Central Office. But he shall not utilize any part of the funds so collected by him for his own personal require-

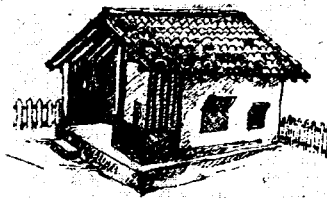
83. One chews on the end of the twig to flay it into a suitable shape and fibrous texture; the resulting mixture of sap and saliva make a hygienic toothpaste.

84. This rule may have been due in part to the influence of Kropotkin. (See p. 63.)

ments. He may appoint, whenever necessary, and if funds at his disposal permit, paid workers needed for his work. He shall keep accurate accounts.... His work will be subject to the inspection and supervision of the Central Office.... He shall submit a report ...for every month... not later than the 15th of the month following. Any neglect in submitting the monthly report and statement of accounts, or in carrying out instructions from the Central Office, will involve cancellation of the agency."⁸⁵ {GCW LX, 12-13}

Human and animal muscles were the favored sources of mechanical energy, and the work was arduous;⁸⁶ and yet a hopeful spirit is apparent in the 45-page guide to the AIVIA exhibition put on in 1936 (and inaugurated by Gandhi) for a meeting in Lucknow of the Indian National Congress. The stated aim was not, as in most exhibitions, "to introduce supply to demand" but rather "to encourage production and enable it to adjust itself to demand." The sixty exhibits covered agricultural occupations (manures and cattle, dairying and milk products, poultry farming, bee keeping, tanning and carcass disposal, oil pressing, molasses and sugar making, flour grinding, rice husking, paper making, sericulture, and lacquer extraction); textiles (with regional techniques in regard to cotton [carding, spinning, weaving], wool and silk); other crafts (involving coir, various kinds of wood and of stone, ivory, cutlery, spectacles, filigree and enamel work, bangles, embroidery, toys, brushes, wires, slate, leather, horn, brass, clay, rattan, etc.); and fine arts.

Kumarappa envisaged even the construction, with widely available techniques and materials, of elegant little village houses. His master-example is shown here. Gandhi described it as "a futurist symbol of what artisans' dwellings would be in rural India of the AIVIA's dreams" {GCW LXVIII, 256}.



85. The rule about monthly reports was soon changed to one about quarterly reports, and the next July a notice was published reminding the agents to send them in {GCW LXI, 252-53}: "Mr. Kumarappa is a vigilant Secretary.... The rules ... should be enforced or repealed. As there is no likelihood of the above reasonable rule being repealed, it is to be hoped that the members will carry out the rule both in the spirit and to the letter." Gandhi reaffirmed to Kumarappa in 1946 that "no responsible person belonging to our organization can accept any pay for services.... Rent and conveyance expenses actually incurred may be charged. We get money from the well-to-do, the Government gets [it] from the starved masses. The less we have to do with Government money, the better." {GCW LXXXV, 208}

86. Herbert Fischer (see note 257), *viva-voce* account, Humboldt University, April 2000.

Marxists disdained and criticized the AIVIA's "cloak of tattered patches." There were press reports in the following vein:

"Heated discussion took place yesterday at the Gujarat Socialist Conference over the resolution stating that the program of the All India Village Industries Association would not solve the problem of the farmers. {SL, 26/vi/1935, 4}

According to a forty-page essay in the journal, *The Twentieth Century*:

"In addition to its numerous ingredients in which are included the revolt of Ruskin against the worship of Mammon, the retreat of William Morris from the soullessness of machinery, the individualist anarchism of Proudhon and Bakunin and the religious humanitarianism of Tolstoy, the philosophy carries in it an added dose of economic potion poured into it by Mr. Kumarappa at the behest of the Bombay Congress — and produced practically to order as a *swadeshi* alternative to the imported ideas of socialism." {cited in KVA, 1}

Jayaprakash Narayan (1902-1979), the most eminent and beloved Marxist in India (known throughout India still today as "JP"), said that Gandhi notwithstanding "his own views of economic and industrial organization" had wanted the AIVIA merely to render "service to the villager by raising his productivity and income and by making his habitat healthier and less exposed to the exploitation of the cities"⁸⁷ —and that:

"Prof. Kumarappa has confused the economic issues in the present world by posing the problem as centralization versus decentralization. The problem in reality is private versus social ownership of the means of production.... Decentralization... is a reactionary step and also an illusory hope. It is reactionary because it turns back the productive forces of society. It is illusory because not having a class basis it cannot materialize. Furthermore, it means lower standards of living for the people. It means scientific and cultural reaction. It means a medieval and rural outlook. It means military weakness."⁸⁸ {JPC, conclusion}

87. JPC, first paragraph. (This is like Romain Rolland's interpretation cited on pp. 105-06.) JP referred to an article "some months back" in Gandhi's journal, *Harijan*. It may have been the one of 30 November 1934, entitled "Why Not Labor-Saving Devices," according to which {GCW LIX, 412-13} "There is no question of refusing to take advantage of labor-saving devices.... There would be no cause for home-grinding or home-husking, assuming that the question of health was not of any importance or, if it was, there was no difference between home-ground flour and mill-ground, or home-husked rice and mill-husked.... I have no partiality for return to the primitive method of grinding and husking for the sake of them. I suggest the return because there is no other way of giving employment to the millions of villagers who are living in idleness." Or it may be a similar article of 4 January 1935 (see GCWL, 54-55).

88. Kumarappa underlined in red this sentence. (See apropos p. viii of this book.) I am impressed by the contradiction between (a) saying that one shouldn't make an issue of centralization vs decentralization and yet (b) arguing against the latter. A few years

Kumarappa's responses to such arguments included an assessment of the "effect Communism has [had] on the common people ... in Soviet Russia":

"[The Communists] have made great strides in bringing light and learning to those who sat in darkness and superstition. Educational opportunities are thrown open to all. Woman rubs shoulders with her mate.... [But] economic militarism ... is driving away all freedom of thought, speech and action... [and] the overemphasis on class consciousness has resulted in creating an atmosphere of violence." {KCC, 2}

He said that:

"Under mass production, whether under capitalism or communism, every person becomes a 'hand' or a 'mouth.' ... We have invented machines that have become masters.... Their strong point is their ability to concentrate ... profits.... Inventors should ... devise [instead] tools and machines that can be operated by one or two and which will remain the servant of Man and will enable every owner to earn his own modest livelihood without squeezing out the life blood of his fellow man. If this can be done, production will be limited by demand and there will be no pressure for markets...." {KCC, 3}

In large-scale industry,

"While the plant that transforms raw materials into consumable articles is located in some one place, the ... raw materials are gathered from the places of their origin and brought together to feed the machinery... at a speed demanded by the technical requirements ... for production at an 'economic speed.'... [And then] when the goods have been produced they have to be sold. Again the problems of routes, ports, steamships and political control of peoples have to be faced. Exchange, customs and other financial and political barriers have to be regulated to provide the necessary facilities. All this can be done only at the point of the bayonet." {KVI, 2-3}

"The nation pays through the nose for its armaments program,⁸⁹ holds raw-material producers in political bondage, and sacrifices its sons.⁹⁰ When the cost of production includes all these, who will say that centralized production is cheap?" {KVA, 4}

In a style of rhetoric apparently influenced by Patrick Geddes,⁹¹ he called upon women to exercise their control of demand so as to bring about such a reform:

after Gandhi died, JP's views on economics changed; see for instance his article, "Gandhi and the Politics of Decentralization," in *GIS*, 225-241. Among Kumarappa's papers is a telegram of 18 June 1952 from "Jayaprakash" to "Professor Kumarappa"; the text is: "Most warmly welcome."

89. Perhaps most of his work in London (see p. 4) had had to do with such payments: "Factories engaged in war work under the Ministry of Munitions ... received from the government a share of their costs if their accounts were audited by professional men, and so auditors were in great demand. This made him almost an integral part of the... organization...." {VKQ, 9}

90. See *KRW* and *KBO*.

91. See pp. 175-76.

"We find it will be necessary to produce articles of everyday needs by decentralized methods.... I appeal to you, sisters, to rise to your proper stature and direct the economic activity of man into [such] rational channels. We have no use for the Dynasty of Might where women are the cave man's captive, nor for the Dynasty of Finance where women are but dressed up dolls maintained in an ostentatious manner for the glory of man, nor for the Dynasty of the Machine which recognizes no sex [i.e. gender] in its machine-feeder unless it be to underpay the weaker one, nor for the Dynasty of Labor which gives her an equal status only to exploit her as an economic producer. We want a Dynasty of Women where women will exercise their authority with foresight and be rational buyers, consumers and creators of demand and [thereby] direct the regenerating economic forces of man and machine into constructive and healthy spheres." {KWI, 4}

In regard to peasants, he held that:

"Where the standard of living ... is near the subsistence level, their purchasing power is spent mostly on food and other necessities. At such a stage, if money is largely used, then it diverts that purchasing power to some extent into luxuries, which often come from distant countries, and thus lowers the true wealth computed in terms of human values. When money is taken by [the] Government from a petty farmer to whom it may mean so many days' food, and is paid to a high-salaried official to whom the same amount of money may mean the price of a cigar, money-exchange is the means of obliterating human value in wealth and of causing an avoidable loss in national wealth." {KBA, 20}

So he proposed "the use of barter in collecting taxes from the [rural] poor":

"Such a system of tax collection and disbursement involves, of course, a great deal of administrative and organizational difficulties, but none that are insurmountable.... We see [such systems] functioning with great efficacy in some Islamic states.⁹²... The State employs contractors to collect its share of the actual produce ... generally one tenth of all produce. In the case of sheep, etc. the due is one animal for every completed ten in the flock with the option of payment of an equivalent in ghee [butter] or other animal produce.

"The contractors receive the products, store them in state granaries and distribute them as directed by the State, and the surplus they realize in cash and pay over to the treasury according to the terms specified in their contract with the State. Naturally these contractors are the media through whom practically the whole of the external trade is carried on and who can and do control a great portion of the internal trade. This readily places at the disposal of the Government an effective instrument to control trade prices at definite and convenient points of focus.

92. Yet the strength of the Moghul Empire under Akbar and his immediate successors was due in part to the use of monetary taxes collected by *zamindars* (see *SHI*, 169, but also note 52 above). In traditional China, however, "the government used to rely heavily upon taxation in kind and the payments of stipends in grain." {FSC, 50}

"The military staff ... are paid [partly] in kind.... If the periodical payments in kind to government servants were so scheduled as to synchronize with the harvesting..., the difficulties of storage would be minimized, and such payments, though they might affect the import of manufactured goods adversely (which would be unpalatable to foreign interests), would ... save middlemen's charges to some extent."⁹³

Apart from these arguments, however, he was so engaged in mitigating the vast underemployment in rural India that he did not undertake a nuanced assessment of the best (from a point of view other than that of maximizing profits on capital) types of mechanization⁹⁴. When Nehru invited him in 1938 to serve on a "National Planning Committee," he was reluctant; Gandhi persuaded him to accept and he joined the committee for a few months, but then resigned because he considered it a waste of time.⁹⁵

In 1939 his "conception of economic organization on which the AIVIA is based" was along the following lines:

"The goal of economic activity is wealth production for consumption by the producers. Wealth is usually produced by the intelligent use of the means of production and the application or employment of human talent or power. Planning, in the first instance, consists in the rational coördination of these three factors.... Thus $W = E + M$...[where] W stands for wealth, E for employment of human talent and M for means in the shape of tools, equipment or capital.... When we look around our country we find E in abundance while M is very scarce, and therefore if our planning is to be effective we have to lay our foundation-stone on labor and not on capital...."⁹⁶

"It does not do to plan vertically, i.e. emphasizing the functions and making them into separate industries, ...which is the way of capitalism. The other way is to take the industries horizontally and study their processes and apply the functional aid at suitable points.... There can be no compromise between these two methods." {GCW LXX, 198-99}

His third book, *Why the Village Movement?* (1936), had been likewise dualistic. It was based on a distinction between "wolf-pack" and "sheep-flock" communities⁹⁷ and was an exercise in angry propaganda⁹⁸ rather than a step ahead in Gandhian economic thought.

93. *KBA*, 21-22. This was written when a public contest (with Kumarappa as one of the three judges) for an essay on barter had failed to yield a winner. (See *GCW*, LXI, 367-68 and LXV, 50 and 160-61.)

94. See pp. 118-19. However, a colleague later recalled (see note 86) that this issue was discussed informally at Maganwadi in the 1930s.

95. See *VKQ*, 78-79. He may have been right: historians report that independent India's "early development plans [i.e. in the late 1940s and '50s] borrowed more from the work of the colonial state's development and planning department set up in 1944 than that of the national planning committee of 1938-40." {*BJM*, 211}

96. See note 295 and the sentence to which it is attached.

97. See p. 26.

In 1939 and '40 he studied the rural economy in central India (*KRI*) and in the far northwest (*KPD*).⁹⁹ The study in central India covered a population of some 1.5 million in some 600 villages surveyed in less than three weeks at very low cost¹⁰⁰ by means of an elaborate questionnaire administered by 235 people organized into twenty teams. This was "not an academic survey," not designed "to further the knowledge of the science of economics," nor "propagandic," but "diagnostic" for the purpose of "saving the patient's life by a suitable prescription ... in relation to the raw material available within the field of our operations." Gandhi published a summary {*GCW* LXX, 34-40}. Kumarappa mentioned to him that:

"One member of the staff, [with] an M.A. in economics, argued that without detailed statistics it would be impossible to prove whether the villages are poor.... I took him with me into the villages and showed him the houses in disrepair and one three-storied house half fallen down and the goldsmith sitting idle."

A gloss on this, no doubt by Kumarappa himself, was included in his official biography (*VKQ*, 84):

"If most of our villages contain ruins of well-built houses and artisans without occupation, ...the evidence of poverty is [better] than old statistics which may prove everything and anything."¹⁰¹

98. Whereas Gandhi in 1929 had written to Kumarappa {*GCW* XLII, 162}, "I have nearly finished your monograph on public finance.... and would like to publish it.... If you are agreeable, please telegraph your assent," he wrote in 1936 to another colleague {*GCW* LXIV, 12}, "I gave Ku's manuscript to Mira for criticism.... She thought it was heavy, but terse enough, some parts not convincing. I am glad you have revised it.... If it is not given to the printers, and I find the time, I shall go through the thing myself." (Later editions were changed substantially to include some arguments which are available also in Kumarappa's subsequent books.)

99. His other activities in the late 1930s included serving on committees looking into the possibility of mass education (e.g. the All-India Education Board, formed in 1936); writing (for *Aryan Path* and *The Hindu*) reviews of various books (e.g. Vergilius Ferm's *Religion in Transition*, Lin Yutang's *The Wisdom of Confucius*, Kirby Page's *Must We Go to War?* and Thomas Mann's *The Coming Victory of Democracy*), and a jail-term in 1939.

100. The average was about five rupees per village. "When some members [of the team] saw during their survey that old women were picking grass seeds for food, they declined to draw even the third-class [train] fare. The party satisfied itself with such lodgings and food as the villagers had. Nothing was specially prepared for them."

101. *LSE* is a recent example, made notorious by *Scientific American* (see *RMM*, also *KES*), of the obfuscating use of statistics in regard to economics. *REI* is another example. (*TEM*, *REH* and even *PHP* are better in this regard.)

An overall finding was that the average income among the villagers surveyed was about a sixth of the hitherto published averages for people in India in general. One of the prescriptions offered was the following:

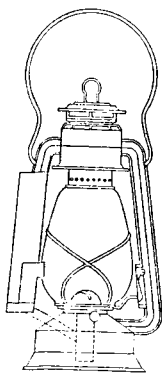
"Little attention is being paid to renewing the fertility of the soil.... The Agricultural Department ... [should supply] to the farmers manure from various depots in the villages at the proper season, getting back their return at the time of their harvest. Manufacture of artificial fertilizers should form a key industry."

Kumarappa's official biography published in 1956 includes a retrospective account of the work done at the AIVIA headquarters. (The word "magan" here refers implicitly to the headquarters' name, "Maganwadi"):

"The Village Industries Laboratory... has done useful research work in [plant] oils, soap, [the] *Magan Dipa* [a dipa is an oil-lamp; an AIVIA drawing of one is reproduced here], paints and varnish, etc... [and each] of the departments ... has carried out ... research ... in its own line along with production work. The wood and stone *chakkis* [grinders] for paddy [rice] husking and flour-grinding have undergone a number of changes.... The present stone chakki with its ball-bearing and screw arrangements is ... more efficient [than the traditional type].... In the *ghani* department [a ghani is an apparatus for pressing oil from seeds] the latest model ... has come out as the best in the All-India competition. The hand-made paper ... we now make from rags has ... won a good name. ... The bee-keeping department has been very nearly succeeded in domesticating the rock-bee which is one of the most difficult things to do. The pottery department has achieved a measure of success in the glazing of ordinary cheap mud pottery and in spreading the technique of the *Magan Chula* [stove]. The ... bakery has kept alive the idea of whole-meal wheat bread.... [Another] department has devised and made popular a small centrifugal hand-machine for making sugar from palm-juice....

"Fifty to sixty workers, on an average, are trained yearly in Maganwadi.... The teachers and staff ... go out often to different parts of the country to train workers in their own areas in ghani, palm-gur, bee-keeping, chakki, Magan Chula, etc. A number of states [i.e. provinces] got their rural-development officers trained in Maganwadi.... Institutions for village industries in Kerala, Tamilnad, Andhra, Mysore, Orissa, Bihar, Gujarat, Bombay and Punjab have ... obtained practical guidance.... The AIVIA publications [have been] nearly 30 in number." {VKQ, 70-72}

This total does not include the monthly issues of the AIVIA journal, *Gram Udyog Patrika*. Yet the organization remained always less than a tenth the size of the All-India Spinners' Association which had been founded ten years before it {BGP, 299}.



THE LAST DECADES

The AIVIA operated in India only, but a worldwide war gave Kumarappa occasion in 1941 to offer some informal observations (of possible interest to economists willing to consider cultural factors) of alleged national tendencies elsewhere as well:

"Every nation's history, social organization etc. will show some philosophy of life running through it all, be it conscious or unconscious. An analysis of the economic aspect of the activities of Great Britain will disclose an emphasis on durability... [whereas] in America ... durability is at a discount. They do not want to manufacture a Rolls Royce. ... In Germany the stake is on efficiency, while in modern Japan, which has to enter highly competitive markets, the objective has been cheapness.... Russia ... has set out to work with a predetermined philosophy ... based on equality of distribution.... China, India and old-time Japan reveal a state of affairs based on a philosophy of live and let live, arising out of the principle of non-violence." {KNW, 1}

In 1942, five Indian economists, including Kumarappa and the executive secretary of the planning committee from which he had resigned in 1938,¹⁰² contributed to a booklet {SKE} about "the economic background to India's problems." A prefatory note described Kumarappa as seeking "to develop a society of largely self-supporting rural units, within which the evil effects of competitive money-economy would be restrained." His essay (see Appendix 2) criticized British policies and made implicitly clear his differences of opinion *vis à vis* the committee:

"An increase in the number of millionaires does not necessarily prove the country's prosperity.... We cannot be blindfolded by the seeming prosperity evidenced by new buildings rapidly rising in suburban areas, nor by the increase in the capital drawn from Indians for working a few industrial concerns, nor by the luxurious lives of city-dwellers. India lives in the villages, and the evidence as to the prosperity or poverty of India has to be sought in the villages."

Shortly before being sent to jail later that year, he drafted the first version of a theoretical scheme that was to become important in his later thinking:

"A study of economic principles may be said to have been initiated from the time of Adam Smith — barely a century and a half ago.... In Marshall and Pigou economic theory has gone to seed in mathematical formulae¹⁰³ rather than [to develop] as a fascinating psychological study of human nature.... From this [latter] aspect we shall classify the forms of human activities....

Economics of Predation.... [helping] oneself to an existing supply without having contributed ... to bring [it] into existence....

102. See p. 36.

103. He should have named Edgeworth (see p. 17).

Economics of Enterprise ... exercising the rights of the individual.... Man creates a supply and holds it for himself.... The outcome of this stage is the laissez-faire attitude.... The devil take the hindmost....¹⁰⁴

Economics of Gregarianism ... [with] certain grades of recognition given to associates. (a) Imperialism.... (b) Fascism, Nazism, Communism and Socialism.... There is less of predation in this [category b than in imperialism] but ... the underlying duties of one group towards another find little place....¹⁰⁵

The Economics of Permanence.... {KET, 1-3}

Jail again

In jail during the war, Kumarappa drafted the text of the first edition of what was to become his best-known book, *Economy of Permanence*.¹⁰⁶ An introductory page sets out a qualified concept of "permanence":

"What is permanent?... [A] human life rarely reaches even a hundred years while the unit to measure the life of Nature will run into astronomical figures.... It is in this relative sense that we speak of 'an economy of permanence' "

104. See p. 120 for a notable use of such a phrase by Amartya Sen.

105. An Indian sociologist has recently observed {OTA, 237}, "One of the most important features of traditional Indian society was the primacy of the group or community over the individual. This may be designated as collectivism which manifests itself in the values embedded in the institutions of marriage, joint family, caste, ... village ... and the like.... Thus marriage was not a union between two consenting adults but an alliance between two families; the individual's obligations to the joint family created familial communalism ignoring the individual's rights; ...the traditional caste and village panchayats [councils] processed disputes and adjudicated cases keeping in mind the autonomy of caste and village rather than the entitlements of individuals; ...the communal pattern of ownership in property inhibited individual initiatives."

106. He wrote also *Practice and Precepts of Jesus*, during a period when the Bible was the only reading material permitted to him. Gandhi later supplied warm introductions to both books. Gandhi had contributed already in 1944 (he was released from jail before Kumarappa) a cool foreword to a book, *The Gandhian Plan of Economic Development for India*, by Shriman Narayan (who married the daughter of his most dedicated capitalist patron, Jamanlal Bajaj). Narayan's book surveys (with a modicum of data and in a rhetorically smoother style than Kumarappa's) some aspects of Gandhian economic thought having to do with poverty in India at that time.

Gandhi wrote also, in 1945, a warm foreword to a book, *Capitalism, Socialism or Villagism?*, by Kumarappa's brother, Bharatan (written during his jail term), who had worked at the AIVIA headquarters for years. This book as well is less strident than J. C. Kumarappa's writings, but again there is no reference to ecological degradation, and Bharatan had (like Shriman Narayan) nothing like his brother's grasp of orthodox Western economic theory: his university studies had been in theology. I imagine that neither of these books would have been written if *Why the Village Movement?* had been more effective.

This is followed by three brief chapters on "Nature." The first one includes not only an adumbration of ecosystems:

"In animate life the secret of Nature's permanency lies in the cycle ... by which the various factors function ... to maintain the continuity of life.... Leaves fall to the ground and are ... decomposed into ... [the chemicals] which the ... plant had absorbed from the soil [and] air.... Bees ... fertilize the flowers.... Life in Nature goes on ... as long as there is no break in this cycle."

—but also a salient distinction between renewable and non-renewable sources of consumable energy and raw materials:

"The world possesses a certain stock or reservoir of such materials as coal, petroleum, ores or minerals like iron, copper, gold, etc. These, being available in fixed quantities, may be said to be 'transient,'¹⁰⁷ while the current of flowing water in a river or the constantly growing timber of a forest may be considered 'permanent' as their stock is inexhaustible in the service of man if only the flow or increase is taken advantage of."

Kumarappa was concerned about the political consequences of competing for access to non-renewables:

"Basing our life pattern on the economy of permanence paves the way for world peace, while the other [kind of economy, based on dwindling sources of consumable energy and raw materials,] leads to disharmony, unhealthy competition, enmity and world wars." {KEP, 10-11}

Chapter 2 discusses "work" and "wages" in ecologically enduring economic systems; then Chapter 3 distinguishes five "simple forms of economies in Nature." These are like the four that I have cited above (pp. 39-40) except that what was there the "parasitic" type is here divided into "parasitic" and "predatory." (Kumarappa's understanding of these terms¹⁰⁸ is the reverse of mine: he describes the parasite, not the predator, as the violent killer.)

The rest of the book is about the human individual. Chapters 4 and 5 treat the concept of free will and include the following passage:

"The main trouble with man arises out of the fact that he is endowed with a 'free will' and possesses a wide field for its play. By exercising this gift in the proper way he can consciously bring about a much greater coöperation and coördination of Nature's units than any other living being. Conversely, by using it wrongly he can create quite a disturbance in the economy of Nature, and in the end destroy himself."¹⁰⁹

107. Whereas fossil-fuels once used are irretrievable, the metals gained from ores can often be recycled.

108. It seems likely that he had got them from one of his American professors (see p. 14) rather than from a dictionary.

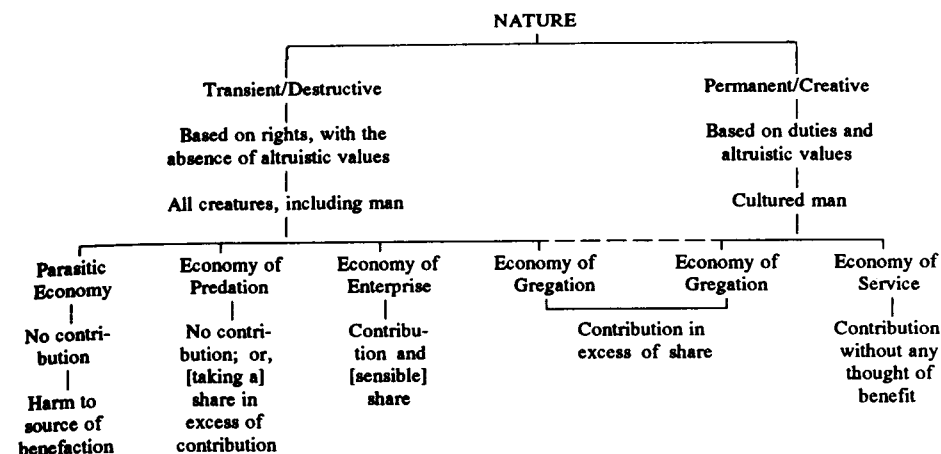
109. See p. 76.

Chapter 6 is about the alleged five forms of economic behavior (parasitic, predatory, enterprising, gregarious, service-oriented) insofar as individuals are concerned. The respective "chief tests" for these five are (1) "destruction of source of benefit"; (2) "benefit without contribution"; (3) "benefit and contribution correlated, with a readiness to take risks" (this is enterprise); (4) "benefit to the group rather than to individual members"; and (5) "contribution without regard to any benefit received by the worker." Kumarappa attributes to his "predatory" type (the one which I would call parasitic) an "emphasis wholly on rights" (*vis à vis* duties). He says that the enterprising type, motivated by "enlightened self-interest and ambition," recognizes a modicum of "duties to others" and seeks "a balance of rights"; the next higher type (engaged in "economy of gregation") submits itself to the "will of the group" (one's contribution to it being "regarded [as] more important than one's share of the benefit"), but is prone to "violence to those outside the group"; and then the highest type (engaged in "economy of service") cultivates non-violence "and makes for permanence." He allows that "the types ... are not always so distinct," and says that for any given individual, "the general classification will depend upon the balance of his actions."

The other five chapters elaborate upon other such sets of distinctions. Chapter 7 speaks of three types of human groups:

- "Animal": predatory/parasitic empire-builders (including the "financiers of New York who hold the South American republics in tribute" and the "shareholders ... who draw their dividends without contributing any personal effort in production") and also, though to a lesser extent, cartels etc. "which through monopolistic control get a greater share of benefit" than their contributions to production warrant;
- "Human": striving "to be content with their own labor without injuring their neighbor";
- "Advanced": with a "sense of duty ... to all creatures." Kumarappa says that "as yet we have not evolved any [such] large social group," but he includes suggestively a woodcut illustration of "a scientist at work [with a microscope and test-tubes] for the benefit of humanity."

A chart (shown on the following page) relates this scheme to some of Kumarappa's dualisms and suggests some implicit nuances of meaning in his uses of terms like "nature" and "creature":



Chapters 8 and 9 deconstruct and reconstruct concepts of value and valuation. Chapter 10 ("Life, Living and Existence") is about what is nowadays often called life-styles. It associates an overall tendency with each of the alleged five forms of socio-economic behavior:

—"House of Imitation," e.g. living in the "best foreign missionary style."

—"House of Adoption," imitative but with "slight modifications which, however, are not distinctive enough to lay claim to originality." A woodcut (reproduced here) provides a witty illustration. (Kumarappa describes also an industrial example: the Japanese adaptation of Adam-Smith-type division of labor,¹¹⁰ e.g. with bicycles assembled in a factory from parts produced by "cottage workers who are supplied with tools and materials. Some of them produce only spokes, others only rims, and so on.")¹¹¹



110. According to Smith, "By reducing every man's business to some one simple operation, and by making this operation the sole employment of his life, the division of labor... increases very much the dexterity of the workman.... The advantage which is gained by saving the time commonly lost in passing from one sort of work to another is much greater than we might at first imagine; a man commonly saunters a little in turning from one sort of employment to another." {SWN, Bk. I, Ch. 1}

111. About five years after writing this, Kumarappa recommended such a practice to mitigate some of the evils of mass production in India. See pp. 52-53.

—"House of Material Creations," such that not only is "the chase of ... pre-existent supply for a demand ... one of the most fruitful sources of modern conflicts and wars," but also the consumer's "creative faculty is buried under the debris of modern factories." Kumarappa would prefer that "the customer ... play the leading role ... personally." For instance:

"Designing one's own house or furniture is a fertile field for the play of one's personality.... Man is so constituted that the less he thinks on problems, the less he is fitted for life. Therefore the ... modern manufacturer, who professes to do all the thinking for the consumer, is really crippling him."

—"House of [drastic] Social Innovations"—e.g. Soviet Communism, which had "failed to usher in permanence and ... [had instead] sunk humanity in a river of blood." Kumarappa held that plans "aiming at material production but lacking root in human nature" are like cut flowers which "are no doubt beautiful" but "retain [only] for a time their natural scent and appearance":

"A planner should rather be like a gardener. He first prepares the soil, sows the seed and waters it, and, having done his part, stands aside.... Similarly, planning should ensure wholesome conditions for the growth of human beings.... The method of starting with a predetermined output and working toward it is not the way of Nature."

—and "House of Sublimation":

"In a country like ours, bristling with socio-economic problems, we need persons who will take on themselves the disabilities, privations and poverty of the masses and, having experienced the sufferings of those around them, will proceed to find a suitable remedy ... open[ing] up wide fields of opportunities for personal development and expression which will not fall foul of the welfare of one's neighbors."

Chapter 11 deconstructs (and reconstructs) the concept of the individual's "standard of living", and presents, in effect, a Gandhian concept of alienation:¹¹²

"A mill-owner ... will plan on his workers leading a complex standard of existence which he will be pleased to call a 'high' standard of living. To achieve this end he will pay his workers higher wages, support a liberal welfare scheme, and get them accustomed to amenities of factory life such as clubs, tea rooms, games, cinemas, good housing etc. The result of this will be that the worker ... will be loath to change places even if his principles are violated by the factory owner.... [When the worker] is habituated to spending money on material wants, these assume the role of necessities without

which, he is led to believe, he cannot live.... Such a standard functions like a nose-string to a bullock."

Chapter 12, about work, does not include a "bread-labor" imperative, but does, by using a medical analogy and a distinction between needs and wants, make out a case against a physically lazy way of life:

"When work [in general] is analyzed it is found ... [to be] a compound of many parts [including] ... routine and rest, progress and pleasure....

"A proper diet is constituted of roughage, nutritive elements and taste. One who desires to have the taste only without the bother of masticating ... may, with the help of modern science, get what he wants but ... will not be able to sustain himself for any length of time.... Also the roughage in our diet plays the most important part of aiding digestion and full assimilation. Similarly, all the constituent parts of work are essential to get the best out of it and to let it serve its ... purpose ordained by Nature."

According to the next (and last) chapter, which is about how the division of labor affects the individual:

"Work, to be healthy and beneficial..., should have diversion and variety in sufficient measure in every subdivided unit of it to prevent its becoming a strain on the nerves. There is, therefore, a limit beyond which division of labor cannot go without impugning its claims to wholesomeness."

This chapter includes some prophetic remarks about the feeding of infants:

"When a mother nurses ... her children, all the return she gets is the joy of seeing [them] well fed and happy—that is her 'wage'.

"From this there is a fall to the 'economy of enterprise' when a wet-nurse feeds the baby....

"When the extravagant claims of [synthetic] baby foods do not bear any close relation to facts, we go right down to the 'parasitic economy' where the profit made is the overruling consideration irrespective of any harm that may befall the baby.... The dignity of work of the mother is lost along with the healthy constituents attached to it."

After World War II

By the time Kumarappa was released from jail in 1945 it was fairly clear that Britain could now hardly keep India in the Empire and that Indians would soon be determining government policies. His concern was rural development, and he treated it under five headings (*KOP*, 42 *et passim*): (1) agriculture and village industries, (2) sanitation, health and housing, (3) village education, (4) village organization, (5) village culture. He said it should "start with an attempt to strengthen the body with a balanced diet and to provide all primary needs of the people" (*KOP*, preface). He reckoned (*KPR*, 2) that India had a per-capita average of 0.7-acre arable land and that even though this had been "inadequate to meet our requirements in food

112. See p. 70.

under the present distribution of cultivation" with its cash crops for export, the land could, if the distribution were properly "regulated and controlled" (KOP, 42), enable India's people to be properly nourished. The following table¹¹³ shows how he reckoned that 77,000 acres of land (i.e. 66,600 in crops plus 15% for "seed and waste") could normally provide 100,000 people with a balanced vegetarian diet¹¹⁴ of some 2850 calories per day and enough cotton for their clothing:

	per capita			acres cultivated
	ounces daily	calories daily	pounds annually	
cereals	16	1600	365	43,400
beans & peas	2	200	45½	5,400
molasses	2	200	45½	1,200
nuts	1	145	23	2,600
edible oils	½	255	11½	3,000
butter	½	-	11½	-
milk	12	240	274	-
vegetables	8	48	182½	1,600
potatoes & tubers	4	100	91	1,000
fruits	4	52	91	900
cotton			12½	7,500

His ideas about implementation included (a) that provincial governments should try out some balanced-cultivation schemes "in small areas and launch them on a large scale after having gained sufficient experience," (b) that local coöperatives, "governed as far as policy is concerned by representatives of the villages as well as ... from the government," should see to the details of administration and "stand between the citizen and the state in regard to the payment of revenue," (c) that government officials

113. This is a slightly simplified version of his table published in KOP and in KPR. See p. 145 for a contrasting passage published in 1983 by the World Bank.

114. REW, 139-144 & Table 11.3 show that notwithstanding the population explosion in India throughout the second half of the 20th century, average per capita availability of cereals had, albeit with big differences among various provinces, reached by 1990 approximately the average indicated in Kumarappa's table, and that the same was true for pulses — i.e. peas and beans, which are vital sources of protein in a vegetarian diet — already by 1960 (i.e. before the "Green Revolution"), but that this latter average went down by more than a third between 1960 and 1990, partly because pulses "in earlier times ... were often grown together with other food grains and were thus not so vulnerable [to decimation] as nowadays, when compact fields of one and the same type of crop provide a veritable field day for rapidly spreading pests."

should "be paid by the ... coöperative societies in kind as regards their primary needs, the balance of their remuneration being settled ... with a certain amount of money," and (d) that "we follow to a certain extent the Russian model of making foreign trade a state monopoly" (KI, 5-7).

His publishing activity moved now into high gear. His books issued in 1947 included:

- A new edition of his 1934 text¹¹⁵ on organizing relief-work and keeping the accounts for it.
- An updated history (KCK), mostly condensed from his analogous texts of the 1930s, of India's public debts and credits.¹¹⁶
- A detailed questionnaire for surveying village industries, with an 84-page supplement of informative "notes on those industries" (KQV).
- An expansion (KWW) upon his 1936 speech on women and village industries.
- Two collections of essays on economics: *The Philosophy of Work and Other Essays* (including "The Gandhian Approach to Economics") and *Gandhian Economy and Other Essays*.
- An account (KSI) of his experiences in jail, with suggestions for prison reforms.

In 1947-48 he visited Europe — mainly Britain — twice, published a set of rather sharp articles on "the real achievements of the West, with the consequences" (KEG), and began to take part¹¹⁷ (until 1954, after which his health was quite poor) in conferences of War Resisters' International.

Gandhi wanted him to be the Republic of India's first Minister of Finance.¹¹⁸ This never happened, but he served on the eight-man Economic Program Committee appointed in November 1947 by the AICC (the executive board of the Congress) to draw up a list of objectives which were

115. KOA; see note 79.

116. He put Keynes's name in the title ("Clive to Keynes"), no doubt in order to imply that as far as India was concerned, Keynes's views in this regard were more telling than the ideas for which he had become famous in the West.

117. See KBW (1948). According to VRE, xxix, at conferences in India in 1949 and 1950 he "took a major role in criticizing Western pacifist movements."

118. Gandhi mentioned this to some of his close colleagues. One of them, Kishorelal G. Mashruwala, told a younger colleague, Dr. S. S. Mohapatra, who told me about it in 2000.

then supposed to be borne in mind by a "permanent"¹¹⁹ Central Planning Commission established in 1950 to design India's Five-Year Plans (1951-'56, '56-'61 etc.). The committee on which Kumarappa served completed its report in January 1948. It synthesized — thanks to Nehru's adeptness, as committee chairman, at formulating fuzzy compromises — the recommendations of four subcommittees, two of which had met at the AIVIA headquarters and one of which Kumarappa had chaired. The following phrases from it reflect the tensions between Kumarappa's approach and that of the subcommittee on "ownership, development and control of large-scale industry including transport, coördination of large-scale industry with cottage industry, [and] priorities in planning":

"A national minimum standard in respect of the essentials of physical and social well-being, within a reasonable period. Opportunities for full employment of a kind which could draw out the best in every individual in the service of the community and for the highest development of his or her personality. Fuller utilization of our manpower, especially on land and in rural industries. Equitable distribution of the existing income and wealth, prevent[ing] the growth of disparities in this respect with the progress of industrialization of the country.¹²⁰ Prior consideration to the income-groups farthest removed from the national minimum [standard]. Economic organization decentralized as far as [this] is compatible with the requirement of an adequate standard of living and the country's internal and external security. More equitable exchange between agricultural and non-agricultural products. Living wage levels for agricultural workers. The use of lands of those unable for any period to exercise the right of cultivating them to vest in the village coöperative community. Maximum size of holding [to be] fixed. The surplus land over such a maximum [to] be acquired and placed at the disposal of the village coöperatives. Progressive taxation of agricultural income. The national minimum standard of living ensur[ing] a balanced diet, sufficient clothing, and living accomodation to every family. Movement of raw materials from one area to another minimized. Marketing so arranged as to reduce the strain on the transport system to a minimum. The special interests of village and cottage industries [to] be borne in mind by the Tariff Board. Industries producing articles of food and clothing and other consumer goods [to] constitute the decentralized sector of the Indian economy and, as far as possible, [to] be developed and run on a coöperative basis [and] for the most part on cottage or small-scale basis. Larger units, inevitable in the case of heavy industries, e.g. manufacture of machinery. Choice of size [to] be determined by the net balance of economic and social advantage, preference being for smaller as against larger units. The respective spheres of large-scale, small-scale, and cottage industries [to] be demar-

119. There is a significant difference between the meaning of the word here and in Kumarappa's writings.

120. Kumarappa in the first chapter of his first book had referred to "transitional periods when nations pass from one stage to another — agricultural to industrial, handicraft to factory system." (See p. 19 above.)

cated as clearly as possible to avoid economic insecurity and destructive competition. Large-scale industry [to] make fullest use of cottage industries for processes which can be handled on handicraft basis without serious loss of efficiency. Large-scale industry to improve the operative efficiency of small-scale and cottage industries. Certain lines of manufacture [to] be reserved for cottage industries. Where a cottage industry is allowed to operate in the same field as large-scale mechanized industry, its output [to] be protected from the competition of the latter by subsidies or some method of price equalization, especially [in] cotton textile industry. In this and similar cases, further expansion of large-scale machine industry [to] be restricted except where this is considered necessary. Regional self-sufficiency the aim. Location of industry [to] be so planned as to make a district of average size, having roughly a population of 10 lakhs [i.e. a million], as nearly self-sufficient as possible in respect of consumer goods which supply daily needs. Not desirable to erect barriers in respect of movement of goods in the interests of regional development." {REP}

Nehru and Kumarappa took the report to Gandhi, who approved of it (and died a few days later), and it was later adopted *pro forma* by the Congress.

Kumarappa published meanwhile an expanded version of *Economy of Permanence* in which he elaborated, in regard to various aspects (political, educational etc. as well as economic) of "man in gregation," upon the ideas he had set out in the first edition about the individual. Among the new chapters was one entitled "National Industries." He saw that in the Soviet-Russian undertaking to "produce wealth in a concentrated form and then distribute it through government,... the danger ... lies in the concentration of power"; but even though he maintained that in regard to "consumption goods, we should put centralized methods of production out of court completely," he allowed that "centralized industries can be used with advantage in the case of public utility concerns such as railways, posts and telegraphs, electric supply [and] irrigation," and that "coal mines, railways and ventures of that type require large capital, a big labor force — everything on a vast scale"; and he went along with the Socialist view that "such industries should not be left to private individuals but should be managed by the state."

In February (1948) the Congress appointed an Agrarian Reforms Committee, headed by Kumarappa. Its more-than-300-page report {KRA}, written mainly by him and submitted before the year was out, was based on reams of documents¹²¹ that he had solicited from all over the country and on

121. Some of them are extant among his papers in the Nehru Memorial Library.

thousands of miles of his own travel to investigate the "actual conditions." Its recommendations were along the following lines — and got a stone-cold reception (since "the [Congress] party's predominant rural supporters [were] the principal land-owning castes":¹²²

"Land not to be in private ownership. The tiller to hold the land directly under the community and to enjoy fully the fruits of his labor. Agricultural costs to form the basis of minimum wages and to be computed in terms not of money but of a unit combining energy, time and material. The minimum wages to provide for the tiller's family life throughout the year (not just during the cultivating season)." {after VKQ, 119-120}

"The report ... recommended abolishing intermediary tenants [i.e. intermediary between the land-owning community and the tillers], giving land to the actual tiller, [and] protecting the tenant from rack-renting.... But by the time the Congress governments in different states [i.e. provinces] were enacting and later 'implementing' [their] land legislation, the original program was greatly diluted in favor of rural vested interests — as regards both heavy compensation and the wide definition of personal cultivation; the latter resulted in the intermediate tenants' taking on huge amounts of land by evicting millions of tenant-cultivators." {GSI, 104-05}

This — and Gandhi's death in the meantime — settled Kumarappa's fate in Indian politics. In 1948-49 he published more anthologies {KBM, KFP, KPE, KPA, KSM, KSP} of articles (mostly from the AIVIA monthly journal), but his status became irrevocably that of an outsider. An anecdote can illustrate. When the government took charge of the AIVIA and the All-India Spinners Association, the new All-India Khadi¹²³ and Village Industries Commission, presided over by the Minister of Industry, met in New Delhi. The members sat around a long table, and at each place a servant had put, among other things, a new pencil, stamped "HB - Faber." Before the Minister could call the meeting to order, Kumarappa begged leave to speak and, contemptuously throwing his pencil on the table, expressed disdain for the hypocrisy of using such foreign, mass-produced products while ostensibly promoting domestic cottage industries. The Minister said, "You are right; but, government is naturally like this. If you wish to influence us you must march in the street with black flags."¹²⁴

122. BPI, 279, cited in VGM, 51.

123. "Khadi" means "handmade cloth."

124. Siddharaj Dhadra (an eye-witness), personal recollection, New Delhi, 2001. The Minister of Industry was Hare Krushna Mahatab. (One of the many better-known such stories about Kumarappa in those days is about how he was forbidden to approach in a bullock-cart Nehru's vast Italian-style villa, Teen Murti House, in order to attend an official meeting. Also well-known is that when the first president of

In 1951 a commercial Bombay publisher issued a book by Kumarappa, entitled "Gandhian Economic Thought," which it had commissioned as a work of popularization.¹²⁵ A useful detail in it is the threefold distinction between (a) "home industry," such as cooking and sewing for members of the same household; (b) "village industry," wherein the "production, distribution and consumption are more or less within the village"; and (c) "cottage industry," producing commodities "the consumption [of which] may be anywhere" {KGE, 36}. A Bombay economist, C. N. Vakil, who had published already in the 1920s an historical survey {VFD} of finance in modern India, contributed a preface to Kumarappa's book, and then in 1956 advocated more government support (than in India's second Five Year Plan¹²⁶) of cottage industry to produce consumer goods.¹²⁷

India after completing his term brought some ashes of Gandhi to Kumarappa and they buried them in a ceremony, Kumarappa wept — because, he said, "We are burying Gandhiji deep in the ground and not in our hearts.") He did not lead protest marches — his health was too poor — but he did co-found in 1952 an NGO which staged protests; see p. 53.

125. The same publisher issued in 1954 a collection of essays by Kumarappa {KPP} on "sarvodaya planning." "Sarvodaya" was Gandhi's translation of Ruskin's title, "Unto this Last," and means "service of all," in contrast to the famous "utilitarian" precept of "the greatest good of the greatest number" (but see BIP, iv and MU, ii).

126. See pp. 55-56 and 118.

127. See VBP (more than 400 pages long) or DDP (seven pages long). According to a recent champion of free enterprise in India, "Prasanta Chandra Mahalanobis ... was the *éminence grise* at the Planning Commission ... [which] throughout the 1950s enjoyed unparalleled prestige.... His biggest contribution was the draft plan frame for the Second Five Year Plan.... In the 1950s there was an alternative vision to that of Mahalanobis. It belonged to the Bombay economists C. N. Vakil and P. R. Brahmanand.... Its starting point was that India lacked capital but had plenty of people. The thing to do was to put these people into productive work at the lowest capital cost. The Bombay economists suggested that we employ the surplus labor to produce 'wage goods,' or simple consumer products — clothes, toys, shoes, snacks, radios, and bicycles.... They were called 'wage goods' because the wage earner would create the demand for the goods that he produced.... This ... strategy would have pushed investments into agriculture, rural infrastructure, agro-industry, and simple consumer manufactures for both the home and export markets. It would have meant postponing the ambitious projects in capital and heavy industry.... It is a great tragedy that no one paid attention to Vakil and Brahmanand's strategy." {DIU, 88-92}

Mahalanobis expected the Second Five Year Plan to make India economically self-sufficient as a nation, but in some important ways it had a contrary effect.

Also in 1951, Kumarappa illustrated his idea of reckoning in terms of energy, time and material, rather than of money. This was in a detailed microeconomic guide to agriculture {KUB} with three large charts ("Equipment," "Production," "Consumption") and four appendices ("Working Account for Cultivating a Unit of Twenty Acres," "Working Account Calculated on Actual Extent of Cultivation," "Consumption Account of Workers", "Production Cost in Kind").

Later that year the government sent him abroad, for a month in China as part of a good-will delegation¹²⁸ and then for two months in Japan to study rural reconstruction and cottage and small-scale industries there. His 38-page report on Japan {KR} surveyed production methods for goods meeting "primary needs" (rice-husking, oil-pressing, soap-making, pottery, bamboo-work etc.), "middle-class demand" (fountain pens, porcelain teeth, clocks, bangles, enamelled wares etc.), "industrial demand" (glass-blowing, retreading tires, insulators, sanitary wares, wire-netting etc.) and "modern demand" (bicycles, umbrellas, sports goods, toys, matches etc.). In the last chapter he said that although "every industry needs adaptation" to conditions in India, "the wide gulf prevailing [in India] between the officials and administrators and the people — financially,¹²⁹ socially and

128. In response to a request from Nehru for "a fuller account of my impressions [of China]" {KML}, Kumarappa published a booklet {KPC} saying that the Chinese had "done amazingly well in reorganizing in a very short time the primary occupation of the nation, agriculture, that was until then in the hands of a few feudal lords. The Communist government [has] formed agricultural coöperatives all over the country." {VKQ, 124}. According to Devendra Kumar Gupta, a protégé of Kumarappa's who became his successor at Maganwadi (interview, Wardha, 1997), a sense of frustration that the Congress had failed to support effective land reform in India prompted Kumarappa to take a positive view of Communist economic undertakings. To the many Gandhians who criticized him for this, he would reply: "In regard to the amount of violence in ... [the] Soviet [Union] today I can only say that ... I saw little of it [during my visit there]" {GUP, March 1953, 15}, and: "All I have done is to appreciate the self-denying spirit, the zeal, [the] devotion to the cause of the masses, the steadfastness and earnestness of purpose and the doggedness with which they set about solving their problems. These great qualities are largely lacking in our country.... We are in full coöperation with the users of atom and napalm bombs.... Do we raise up our holy hands and non-coöperate with them?... Why then this "holier than thou" attitude [toward the Communists]? We need humility and open-minded generosity." {KRC, 2}

129. Twenty years earlier he had implicitly criticized the colonial government in this regard (see p. 22).

educationally" should be "remedied by introducing the pay scale that prevails in Japan, and [by] making education universal."¹³⁰

Two other recommendations were:

"We should follow the Japanese irrigation system... [of] controlling rivers at the very source by putting dams across mountain streams and building up the sides, [and] leading out canals from them into the fields"

and:

"Where modern demand calls for the organization of new industries — like manufacturing bicycles, sewing machines, watches and clocks — [the] government should seize this opportunity of providing employment to old-type artisans who have lost their occupations like blacksmiths, metal casters and goldsmiths. For this purpose [the] government should set up decentralized [model] units specialized in making the various component parts on a coöperative basis."

In May 1952 he co-founded, together with a rural social worker from central India, a politically oriented "Society for Economic Equality."¹³¹ He said:

130. According to an anonymous preface, "the views expressed ... are those of Dr. Kumarappa, and the publication of the Report by the Government of India does not imply ... acceptance or endorsement." India today still lacks an effective national program of universal primary schooling.

131. The Hindi name is *Arthik Samata Mandal*. (It is now a social-work agency.) The co-founder was an atheist, G. Ramachandra Rao ("Gora"), to whom Gandhi had written in 1946 {GCW, LXXXIII, 390; GAG, 52}, "Though there is a resemblance between your thought and practice and mine superficially, I must own that yours is far superior to mine." Gora organized Arthik Samata Mandal's activities in consultation with Kumarappa. An example was in the province of Kerala in 1958-59. In the elections of 1957 the Communists had won a majority in the provincial legislature, and now had begun to implement land reform and to destroy, sometimes by illegal and violent means, the Congress Party at the local level. The central government in New Delhi used a provision in the Constitution to replace the elected provincial government with emergency rule by a governor appointed from New Delhi. Gora toured Kerala for several weeks, calling for "partyless democracy" (see *GPD*). The Arthik Samata Mandal group marched with two flagpoles; all the party flags (none of them black: see p. 50) were on one pole; the other pole had no flag and symbolized citizens with no party affiliation. The idea was that the local village councils could work without political parties. Arthik Samata Mandal (and then ostensibly JP some years later — but in the end JP led a national party opposing Indira Gandhi) tried to have this idea extended to the provincial and national levels. (My source for this information is some interviews with Gora's eldest son, Lavanam. Gora's life is described in *SGL*.)



"In the last five years the conditions of the masses have gone from bad to worse... [but] our erstwhile colleagues [i.e. former activists in the anti-imperial movement led by Gandhi] who had taken possession of the government and the palaces of Delhi have vied with each other to maintain ... pomp, glory and splendor.... A deep feeling of frustration pervades the country." (KAM, 1)

Nehru himself was living like a king, partly because he thought this would bolster the authority of the central government in the new nation which the British wanted to see broken up into Balkan-like fragments.¹³² He initiated nonetheless a program for the villages,¹³³ though allocating much less to it than to building up heavy industry.¹³⁴

"He [Nehru] created a community development program in the 1950s, funded partly with American aid. Begun with great fanfare and enthusiasm, the program soon became hopelessly bureaucratized. Like many other well-intentioned programs, it failed because Nehru did not have the patience, the managerial skills, or the passion to implement it. Nor was it Gandhian in spirit — it was 'top down' rather than 'bottom up.'" (DIU, 86)

Kumarappa took a dim view of the American role:

"While the USA contributes [ca.1/8 of the cost]..., it is given a controlling voice in the affairs of the Community Projects.... If we have no funds to cover 55 projects, why not cut down the scheme by one eighth — make it 48 projects ... and maintain our self-respect?... The whole scheme reflects an amazing lack of confidence....

"[It] seems to bypass the fundamental rural question—land reform.... Land reform means restoring the land to the community to be used for the general benefit of the community ... [whereas] the Americans look upon land as an instrument to produce commercial goods. This latter approach leads to competition and conflict....

132. When the last viceroy went to India in 1947 to negotiate a speedy withdrawal, he proposed (as the British had done already in 1942) that each province be free to join or not join the larger nation; the secret British code-name for the proposal was "Plan Balkan" (see SMI, 448).

Arthik Samata Mandal (see note 131) conducted in 1961-62 a 1000-mile protest march about this from Gandhi's hut in central India to Nehru's palace in New Delhi. Nehru told the marchers he would act on their petition if they could prove that most of India's citizens wanted the prime minister to live in a hovel in a slum. See SMB, 356 for a British account of the Indian cultural background to this view: "A further Mughal bequest to the British was official ostentation...."

133. "'Community Development' was one-half of the price paid by the Government of India (the Khadi and Village Industries Commission being the other half), committed as it was to rapid industrialization, to settle its conscience with having allowed Gandhiji to be named as Father of the Nation." (GAM, 83)

134. Between 1950-51 and 1965-66, the share of consumer goods in total industrial production in India declined from 68% to 34%. (GSI, 118)

"...Those who are responsible for this plan have left out any need for human psychology. The Americans know no more about us than we do of the Eskimos....

"Generally my fear is that this is the thin edge of the wedge of the era of American financial imperialism¹³⁵ striving to fill in the vacuum created by an inefficient [Indian] administration in the wake of the departure of British political imperialism."¹³⁶

Semi-retirement

Kumarappa visited Eastern Europe and the USSR several times between 1952 and 1955 (VRE, xxx), but then, obliged by poor health to withdraw into semi-retirement, moved to a Gandhian ashram in his native province in south India and set up a training institute in village crafts.¹³⁷

He would still write now and then on national issues. One such issue was a reform (achieved in 1956) of the old colonial and/or pre-colonial provincial boundaries. The new ones in south India were along linguistic lines;¹³⁸ he suggested instead "an economic approach" which would not "encourage linguistic bickerings and feed parochialism":

"The largest occupation being agriculture and allied village industries, we should concentrate on all that appertains to the exploitation of the soil. Our land is dependent on seasonal monsoon rains. Hence rivers should assume a major role in all our thoughts. We are periodically confronted with floods, droughts and shortage of rainfall at places. Therefore water conservation and river control are definitely indicated as the major planks of our program of reconstruction. In the main, our States [i.e. provinces] should be able to control our resources without coming into conflict with the people of other States. This would mean that the States should follow river valleys.... Most of our rivers run [east or west].... Therefore, the sea [would] ... limit the extent on the east and west of most States.

135. Between mid-1951 and mid-1968, India's external debt grew from Rs.320 million to more than Rs.60300 million. (GSI, 125)

136. KCP, 1-3. According to BC, 5, "Mr. [Chester] Bowles [the US ambassador] was asked to comment on Dr. J. C. Kumarappa's remark that American aid to India was a noose around India's neck. 'If Dr. Kumarappa, whom I do not know, said that, then he must be a foolish man and I would like to argue it out with him,' Mr. Bowles replied." They met, and Kumarappa thereafter described Bowles as a "well-intentioned ...advertiser" (KUS).

137. See note 4.

138. Thus Andhra Pradesh ["pradesh" means province] contains predominantly Telugu-speaking folk; Karnataka, Kannada-speaking; Kerala, Malayalam-speaking, etc. One result has been that in some provinces the most successful party in elections nowadays is one whose *raison d'être* is to champion the use of the provincial language rather than Hindi or English. Thus no party can win a majority in the national parliament, and every national election is followed by a period of Italian-style political horse-trading, with the support of some of the provincial parties up for grabs from the highest bidder.

"The irrigation works will take the form of tanks and canals on both sides of the rivers, directing the river waters into these for storage and distribution when needed. In this function we can control the floods which now devastate the land periodically....

When these rivers are connected by canals we can have ... transport by water ... cheap as compared with railways and trucks....

Conservation of forests along the river valleys can come under unified control ensuring a coördinated policy." (KRV)

The longest document that he sent from the south to the government in New Delhi was an eight-page report (KRD) on the Community Development Program in a number of local villages (27, according to GAM, 84) that he surveyed in 1956. The main problems described in the report were: ineffective bureaucratization, corruption (the bureaucrats were exacting illegal commissions), injustice (the well-to-do were the main beneficiaries of the anti-poverty programs), unemployment (e.g. among people traditionally engaged in building houses), poor hygiene (in regard to sewage), ecological degradation (in regard to forests and the soil) and lack of health-care and of substantial progress toward universal primary schooling.¹³⁹

"Maintenance and supervision after initiating the program[s] are very poor.... Co-operation in these programs has come largely from the well-to-do classes and so the ... amenities have mainly centered round their own sections of the villages....

"The surroundings of wells are [sometimes] extremely muddy and dirty.... A certain amount of coöperation must be obtained from the villagers to keep the place clean.... Disposal of ... sewage has [most often] not been carefully attended to... [but] in one or two villages the sewage is led into manure pits and utilized to prepare compost... [and] contracts have been given to prepare and sell the manure. This system should be more widely followed....

"Children's education ... is not being spread as fast as it should.¹³⁹...

"There is hardly any well organized provision for the care of the health of the people....

"Emphasis has been placed on road-building... [but] sufficient care has not been bestowed on the [ensuing] social and economic changes.... Production... [of] raw materials for mills has been increased, while food production has yielded place to the cultivation of cotton, sugar-cane and tobacco....¹⁴⁰ Country tiles have been replaced by cement... and asbestos sheets. The old-time potters and others engaged in house-building industries have been dislodged....

139. When the Constitution of the Republic of India was being drawn up, Nehru yielded, in regard to this issue, to the landlords who wished to prevent the peasants from becoming literate. Universal primary schooling was allocated (in Article 45) to the "Directive Principles" section stating certain objectives for which there would be, according to the Constitution, no legal sanctions to enforce their implementation.

140. See note 17 and the sentence to which it is attached, and the first citation on p. 120.

"...Most of the men in charge [of the government's agricultural demonstration centers] are not qualified to give a real lead to the people. Their one qualification seems to be the holding of a degree from some agricultural college.... Such men should be given an average farm with a pair of bullocks and asked to demonstrate how such a farm can support a family.... Ordinary farmers should be attracted ... for inspiration as to what they themselves can do on the same footing. Today the demonstrator only demonstrates how a man can live comfortably on an unearned income....

"The irrigation tanks are as a rule silted up and ... dry most of the year through. If these tanks are desilted ... the farmers can get two or three crops a year where getting even one is a gamble today. Attention to these tanks will [also] give us control over floods and reduce erosion.... This is one of the problems crying for immediate attention but is much neglected....

"There are no facilities for soil ... analysis.... The government seems more anxious to dispose of ... [its artificial] fertilizers than to observe the evil effects ... in the course of years of [their] indiscriminate use....

"As regards pests and disease of plants, there is hardly any provision to help the farmers in need....

"The government is ... anxious [about] the revenue production of forests rather than [about] their being a conserving ground for water. Every village should have its common lands properly taken care of....

"The whole scheme is top-heavy financially.... Old-time government officials used to expensive ways should not be employed in this rural work.... Their example to the younger generation is demoralizing. The Revenue Department officials have introduced a regular sliding scale of illegal commissions in distributing grants etc."

He died on the twelfth anniversary — 30 January 1960 — of Gandhi's assassination.



Kumarappa and Vinoba Bhave in 1956

SOME THEORETICAL BACKGROUND

This section is for readers unversed in the history of Western writing about economics. It will sketch the parts of that history (down to Kumarappa's day) which seem to me relevant to his and to Gandhi's ideas about economics.

Some orthodox precepts

Kumarappa regarded as invalid or quite inadequate some basic precepts of an orthodox tradition¹⁴¹ going back to Adam Smith (1723-1790):

- People in their economic activities ("economic man") are motivated solely by a desire to gain wealth.¹⁴²
- An "invisible hand" ensures that such exclusively selfish behavior in commerce promotes the public interest.¹⁴²

141. My use of the term "orthodox" is discussed on pp. 2-3; see also p. vii.

142. These concepts of economic man and the beneficent invisible hand go back to Smith's explanation of how a reluctance to invest abroad promotes other people's wealth within one's own nation:

"It is his own advantage,... and not that of ... society, which [the individual] has in view. But the study of his own advantage, naturally, or rather necessarily, leads him to prefer that employment which is most advantageous to the society.... Every individual... neither intends to promote the public interest, nor knows how much he is promoting it.... By preferring the support of domestic to that of foreign industry ... he intends only his own security; and by directing that industry in such a way that its produce may be of the greatest value, he intends only his own gain; and he is in this, as in many other cases, led by an invisible hand to promote an end which was no part of his intention. Nor is it always the worse for society that it was no part of it. By pursuing his own interest he frequently promotes that of the society more effectually than when he really intends to promote it. I have never known much good to be done by those who affected to trade for the public good. It is an affectation, indeed, not very common among merchants, and very few words need be employed in dissuading them from it." (SWN, bk. IV, ch. ii)

(Sharing within one's immediate family could have been allowed for by saying instead that the exclusively selfish behavior of each *household* automatically promotes the welfare of the others. A nice aspect of this ploy would have been that the word "economy" is derived from an ancient Greek word for "household.")

In CEE, vii a modern partisan of Smith discusses his psychological views; RES is more recent and better documented. Note 189 refers to some accounts of recent qualifications of the economic-man and invisible-hand precepts. A mid-19th-century *locus classicus* for the former is John Stuart Mill's statement (MDE, 137) that "political economy ... is concerned with [man] solely as a being who desires to possess wealth." (To earn his living Mill wrote political dispatches in London for the East India Co.)

- All reckonings are to be made in terms of a "closed system" of social exchanges, rather than in terms of an "open system" by taking account also of ecological sustainability or (as the case may be) degradation.
- An automatic "iron law" ensures that workers normally receive no more than subsistence wages.¹⁴³ (Whether this contradicts the idea of the "invisible hand" depends on one's concept of the public interest.)
- Demand always proves adequate to consume supply ("Say's Law").

19th-century normative economics

Kumarappa belongs to the tradition of "normative" writing on economics, that is, writing which explicitly reflects ethical values. This tradition down to his time included: (1) in France and England, Sismondi and Ruskin;¹⁴⁴ (2) in Germany, the *Kathedersozialisten*; (3) some Russian anarchists; and (4) among Indian writers ca. 1900, Naoroji, Dutt and Gokhale.

The French-English line goes back to J. C. L. Sismonde de Sismondi (1773-1842), who disproved Say's Law, discovered business cycles with booms and depressions, stressed that technological progress can cause mass unemployment and that market adjustments take time and cause a lot of suffering, and invented the 19th-century concept of class struggle (which was then so important to Marx). Thomas Carlyle¹⁴⁵ translated

143. The term "iron law" is due to Ferdinand Lassalle (1862), but the idea goes back to Ricardo:

"Labor, like all other things which are purchased and sold, and which may be increased or diminished in quantity, has its natural and its market price. The natural price of labor is that price which is necessary to enable the laborers, one with another, to subsist and to perpetuate their race, without either increase or diminution." (RPE, the first paragraph of the chapter on wages)

In the British parliament Ricardo voted against providing day-care centers for the children of working people, because, he said:

"If parents felt assured that an asylum would be provided for their children, in which they would be treated with humanity and tenderness, there would then be no check to that increase of population which is so apt to take place among the laboring classes." (RWC, V, 1).

This kind of thinking and feeling still today gives the concern about the current population explosion a bad name among many people who ought to share the concern.

144. This part of the tradition is described in LLC, and the following paragraph is based mainly on that account.

145. RVP describes Carlyle as having been, "from the field of letters, the voice that carried farthest and meant most to reflective British readers of 1845-1865."

some two hundred pages of Sismondi's writings on economics, devised the term "captains of industry" and the epithet "dismal science" for orthodox economic theory (which other critics had been content to call a "foul philosophy" and a "pseudo-science"¹⁴⁶), and encouraged an admirer of his, John Ruskin (1819-1900), to write on economics. In a series of four essays published in 1862 as a book entitled *Unto This Last*,¹⁴⁷ Ruskin undertook to supplant the doctrine of the "invisible hand" by arguing that affectionate coöperation and a sense of social justice promote prosperity better than greed and competition do. His rhetoric is outmoded today, but his ideas are part of the historical background to Gandhian economic thought, and indeed Gandhi's only substantial essay on economics is a paraphrase of this book.¹⁴⁸

(John Hobson (1858-1940) as a student at Oxford admired Ruskin's book, but considered it "a passionate rebellion" rather than a "truly critical and constructive work." He undertook to remedy this in various writings, some of which Kumarappa read.¹⁴⁹ Frederick Soddy, a British Nobel laureate in physics who admired Ruskin's book, developed in the 1920s a line of economic thought distinguishing between monetary and material aspects of human life;¹⁵⁰ but Kumarappa did not, as far as I know, encounter his ideas as such.)

146. Nowadays this concept is sometimes applied to neo-orthodox economics, as in the following passage:

"I regard [mainstream (neoclassical) economics] as pseudo-scientific for the following reasons. First, a key concept of the theory, namely, that of (subjective) utility, is not mathematically well defined.... Second,... experimental psychologists have refuted the neoclassical dogma that people always attempt to maximize their expected utilities. Third, mainstream economics makes no room for disequilibria like unemployment ... combined with inflation. Fourth, the theory has been unable to predict any of the major booms and slumps — such as the 1929, 1981, and 1990 recessions [in the USA]. Fifth,... mainstream economics pays no attention to the adjoining social sciences.... [etc.]" {BIS}

For some other such arguments see *BFP*, xiv, *HIS*, *KDE*, and *PEH*, 21-22 and 90.

147. This title refers to the Biblical parable (*MG*, xx, 14) about the master of a vineyard paying just as much to a worker who was hired late in the day as to one who worked all day long, and explaining to the one who had worked all day: "I do thee no wrong ...[by giving] unto this last even as to thee."

148. See pp. 93-97.

149. See p. 20.

150. This distinction has been made in philosophical writings ever since Aristotle (*AP*), but to ignore it — by taking for granted that all the material aspects of human life can be assessed adequately in terms of a uniform, one-dimensional kind of unit —

The *Kathedersozialisten* influenced Kumarappa through his main professor at Columbia University.¹⁵¹ The following brief account of them is extracted and translated from a standard handbook of German history:¹⁵²

"The argument about socialism and workers' issues became a dominant theme in national German economic thinking when Albert Schäffle pointed out in 1864 how economic liberalism [in the traditional European sense of advocating *laissez faire*] was one-sidedly bound to the interests of the upper middle class, and called upon professional economists to take a critical approach to the economic catechism of the liberal bourgeoisie. Schäffle found agreement and support among other national economists [who] belonged to quite various theoretical schools but all supported government intervention in relations between capital and labor. Their opponents in the business world derisively called them *Kathedersozialisten* ["armchair socialists"]¹⁵³ and they proudly adopted the label [and] founded in 1872 an 'Association for Social Politics'.

"In the German social sciences after the turn of the century, a dispute about value judgements was ignited by the activities of the *Kathedersozialisten* and led to a more critical methodological understanding of the social sciences."¹⁵⁴

The acceptance of ethical values in academically respectable German economic thinking had palpable consequences:

"German social policies were strongly stimulated by the ideas of the *Kathedersozialisten*. [They] held the professorships in the economic and social sciences at the German universities in the last decades of the 19th century, so an entire generation of high state bureaucrats and politically alert academics was substantially influenced by their views. In 1881 a social-security program was introduced in the *Reichstag* [the national parliament]. Health insurance, with half the costs paid by the workers and half by the employers, was enacted in 1883; accident insurance in 1884; old-age pensions in 1889." (extracted from *BRW*, 303-06)

In Russia (which had no professors of economics in the 19th century), the great novelist Leo Tolstoy (1828-1910) after writing *War and Peace* in the 1860s became, in the 1870s and '80s, ever more religious and morally anxious — he was a rich aristocratic landowner — about gross economic

is just as convenient to academic economists as money itself is to capitalists, merchants and modern affluent consumers.

151. See pp. 14-19.

152. *BRW*, 256-57. The account there is more detailed than my extracts.

153. "*Katheders*" (cognate with "chair") refers here to academic professorships. Of course the men appointed to the professorships did not advocate going out in the street to make revolution. To avoid confusing them with Socialists they are usually referred to in English as "the German historical school," but they were not a school in any academic sense.

154. Neo-orthodox economic theory excludes this by claiming to be divorced from ethics.

inequalities.¹⁵⁵ This led him to a precept which was taken over by Gandhi and hence influenced Kumarappa to some extent. Gandhi called it "bread labor";¹⁵⁶ Tolstoy's account is in Chapter 38 of *What Then Must We Do?* (1886):¹⁵⁷

"Labor, if it has for its aim not the obtaining of the possibility of being idle and exploiting the labor of others, such as is the labor of those who acquire wealth,¹⁵⁸ but the gratification of needs, naturally draws one from the city to the country, to the land, where this labor is most fruitful and most joyous....

"We sleep eight [hours per day].... If a man of any mental activity should devote five hours each day to his [mental] activity, he would do an enormous amount, so what becomes of the remaining eleven hours? ...Physical labor not only does not exclude the possibility of mental activity, [but] improves its quality.... [In my own experience,] the tenser the work was [and] the more it approached what is considered rough agricultural labor, the more enjoyments and knowledge did I acquire, and the closer and more amicable was my communion with men.... In proportion as my labor became more fruitful, my demands of other people's labor became less.... [And,] just as ... newspapers, theatres, concerts, visits, balls, cards, periodicals, novels, are nothing but a means for supporting man's spiritual life outside its natural conditions of labor, ...so everything which we call hygiene and medicine is an attempt to deceive the natural physical demands of human nature." {TW, 298-303}

Tolstoy was something of an anarchist¹⁵⁹ and saw no need to "establish any coöperative society" for physical labor since "a laboring man naturally

155. *Anna Karenina* was written in the 1870s. Before beginning *What Then Must We Do?* in 1882, Tolstoy wrote *An Examination of Dogmatic Theology* and *Union and Translation of the Four Gospels* in 1880, and *A Short Account of the Gospels* in 1881. His religion was unorthodox (see *SLT*, xx-xxiii).

156. See pp. 103-04.

157. Gandhi read this and other essays by Tolstoy, and corresponded with him; the main topics of their correspondence were "passive resistance" (a term which Gandhi in 1906 dismissed as inadequate) and religion, in regard to which Gandhi was most impressed by Tolstoy's *The Kingdom of God is Within You* (of which the first English translations had appeared in 1904). Gandhi's second commune in South Africa was called "Tolstoy Farm"; and Romain Rolland (who wrote biographies of Tolstoy and Gandhi and corresponded with them) mentioned in a letter (to someone else) of 19 September 1930 (*RGC*, 24) that Tolstoy's "devout secretary" Paul Birukoff "always keeps Gandhi's portrait above his bed, facing that of Tolstoy."

While it is beyond my scope to trace the historical background to Tolstoy's concept of bread labor, I note that Mikhail Bakunin (1814-1876) recalled in 1867 that an earlier European revolutionary, François-Noël Babeuf (1760-1797), had envisaged a social system in which everyone "would be compelled to perform both muscular and mental labor, each according to his strength and capacity" (*BA*, 115; *BO*, I, 37).

158. This view of the social function of money had been set out in detail by Ruskin in *Unto This Last* (see p. 95), which Tolstoy admired (*LRV*, 303).

joins the existing cooperation of working people" (whereas Gandhi and Kumarappa established the AIVIA, one principle of which was to make use of muscle-power, human or animal, rather than electric or internal-combustion engines¹⁶⁰).

In the early days of the AIVIA, Kumarappa found {KPK} some "eternal truths" in a book {KCB} by the Russian anarchist revolutionary, Prince Pyotr Kropotkin (1842-1921). Kumarappa liked not only "the non-violent methods of expropriation suggested by Kropotkin,"¹⁶¹ but also his precept that man "produces most when he works in freedom ... [and] has a certain choice in his occupation" (which was not the case in the traditional caste system in India). Kumarappa found "food for thought in solving our own problems of the present day" in Kropotkin's view that:

"Well-being — that is, the satisfaction of physical, artistic and moral needs — has always been the most powerful stimulant to work. Therefore a society aiming at the well-being of all, and at the possibility of all enjoying life in all its manifestations, will give [first place to] voluntary work, which will be infinitely superior and yield far more than work has produced up till now under the goad of slavery, serfdom or wagedom."

Finally, three turn-of-the-century Indian writers on economics — Dadabhai Naoroji, G. K. Gokhale and R. C. Dutt — influenced Kumarappa, either directly or else through Gandhi.¹⁶²

Naoroji was primarily a politician. His *Poverty and Un-British Rule in India* is an anthology of his writings and speeches — he was a member of the British House of Commons — from 1876 to 1900. Its main purpose was to show that "the present system of [colonial] government is destructive and despotic to the Indians." Naoroji is said to have been the first to describe comprehensively¹⁶³ Britain's drain of wealth from her greatest colony. Here are some of his arguments to the effect that the taxation was crushing:

159. For a succinct account of this, see *WAP*, 250-53.

160. See p. 32.

161. On Kropotkin's views in regard to violence, see *MK*, 141-42, 149, 174-75, 206-07 and 211-13. He is not mentioned in Gandhi's *Collected Works*. However, an interesting opinion shared by Kropotkin and Gandhi is that Darwinian "natural selection" in some ways favors altruism (see p. 91).

162. I haven't the linguistic capacity to investigate the native cultural background to their ideas.

163. A recent British historian {*SHI* 257-28} admits that the tax revenues collected in colonial India "met state expenses and, except for a few years, yielded a surplus that was

"The [average per capita] production of India is hardly enough for the bare necessities of life.... England raises [at home]... about 8% [in taxes]... from an [annual average] income of about £30 per head; whereas the Indian Government raises ... about 15% ...out of [its annual average] income of 40 shillings per head.... It must ... be particularly borne in mind that ... from abundance [of income] you may give a large percent with ease... but from insufficiency, any burden is so much privation." (NPI, 58-61)

"His Lordship ... is well aware that whatever revenue is raised by other countries... returns [somehow] back to the people, and remains in the country; and therefore the national capital, upon which the production of a country depends, does not suffer diminution; while with India ... the case is quite different." (NPI, 60)

Naoroji often set out arguments about fiscal details; here are some simple examples:

"Imports in India are declared at the 'wholesale cash price less trade discount' at the port of import, which means the value at the foreign port of export, plus freight, insurance, and other charges to the India port of import, and also plus 10% for profits.... But in the case of the United States the declared value of imports is only the value declared at the foreign port from which the merchandise was exported, which means, without adding the cost of freight, insurance, and other charges and 10% profits." (NPI, 131)

"Gold and silver are not produced in this country [India]. All bullion is imported and is paid for from the produce of India. It, therefore, can add nothing to my estimate of production [in India]. The only addition is the industry employed on it to convert it into ornaments. This industry for the ordinary native ornaments will be amply covered by taking on an average an eighth of the value of the metal." (NPI, 127)

Kumarappa engaged sometimes in this kind of argument. Gandhi avoided it,¹⁶⁴ but read and valued Naoroji's book and knew him personally.

Romesh Chunder Dutt served for many years in the colonial civil service in India (having ranked in the top one percent among candidates who took the qualifying examinations in 1871) before writing his two most famous books, *Economic History of British India, 1757-1837* and *India in the Vic-*

passed to Britain in the form of 'Home Charges'.... The Home Charges were raised principally from Indian land taxes, and, not long after 1860, Indian nationalists began to refer to them as 'the Drain'." By the late 19th century "Britain had achieved a favorable balance of trade with India" amounting to "some £25 million in 1880. The double withdrawal of treasure and commodities from an impoverished India was used to balance Britain's trade deficit with the USA and [continental] Europe."

164. See p. 99 for Gandhi's response to the statistical arguments of apologists for imperialism.

torian Age. These books, which are cited in Kumarappa's thesis, were Dutt's response, totaling more than 1000 pages, to a British aristocrat's accusation of inaccuracy in his *Famines in India* (1900).¹⁶⁵ The following summary of the fiscal heritage (to India) of the East India Company is from a chapter entitled "Finance and the Economic Drain (1793-1837)":

"The British nation had spent millions of their own money in acquiring dominions in other parts of the world; but in India an empire had been acquired, wars had been waged, and the administration had been carried on, at the cost of the Indian people; the British nation had not contributed a shilling.... When they [the East India Company] ceased to be traders in 1834, it was provided that the dividends on their stock should

165. A succinct assessment (NMG, 91) is that "there were seven famines in India in the first half of the 19th century; there were twenty-four in the second half." BFI gives a detailed analytical narrative. According to a recent British historian (SHI 262-63),

"Localized famines leading to higher than usual death-rates had occurred in many places even during the first half of the nineteenth century. The [more widespread] famine which struck in 1866-67 is usually called the Orissa famine, but in reality mortality extended well into the Gangetic valley, far down the eastern coast of the Madras Presidency and across the peninsula to parts of the Hyderabad and Mysore principalities. Three million people were affected and deaths of 800,000 in excess of normal were recorded. Almost immediately afterwards, from 1868 to 1870, famines affecting around 21 million struck Rajasthan, the western Ganges region and parts of central India and the northern Deccan, causing excess deaths of around 400,000. During the last thirty years of the century the dreadful toll increased: 1873-74 in Bengal and eastern India, affecting a quarter of a million; 1876-78, involving 36 million in parts of the Ganges again and also Madras, Bombay, Mysore and Hyderabad, with deaths of 3.5 million. The century ended with two other massive outbreaks of famine and disease nearly everywhere in the subcontinent, with more fearsome death counts: 1886-87, affecting 96 million and causing the excess deaths of over 5 million, and again in 1899-1900, with 60 million affected and another 5 million dying prematurely.

"...The theory that the scourge of nearly half a century was caused by poor monsoons — acts of nature for which neither the state nor any human agency was responsible — was believed for a time. However, the virtual elimination of mass famine deaths for most of the twentieth century, when recorded climate data have not been different, makes such a fatalistic explanation unacceptable. The terrible recurrences of sustained food scarcity resulted in part from the rapid commercialization of the agrarian economy beginning in the 1860s. Contributions to the disasters came from the cotton 'boom' [when the Civil War in the USA cut off supplies of raw cotton from there to England] in the development of a national market linked through the railways and the more exacting contractual arrangements for moving food and other commodities regardless of social costs."

A recent book (FBE) of photographs celebrating nostalgically the British hegemony in India includes the one shown on the following page:

continue to be paid out of the taxes imposed on the Indian people. And when, finally, the Company ceased to exist in 1858, their stock was paid off by loans which were made into an Indian Debt. The empire was thus transferred from the Company to the Crown, but the Indian people paid the purchase-money... [and still do] to this day... in the shape of interest on [the] Debt." (DEH, 398-99)

After an analysis of statistics, the chapter concludes:

"The home charges, which amounted to three millions when Queen Victoria ascended the throne, had risen to sixteen millions when the Great Empress passed away. So great an economic drain out of the resources of a land would impoverish the most prosperous countries on earth; it has reduced India to a land of famines more frequent, more widespread, and more fatal, than any known before in the history of India or of the world." (DEH, 420)

The opening of the corresponding chapter ("Finance and the Indian Debt") in Dutt's book on India in the Victorian age illustrates his use of historical details:

"Two conflicting policies prevailed in India," said Sir Charles Trevelyan in 1873 in his evidence before the Select Committee on Indian Finance. 'One, the policy advocated by me, of reduction of expenditure; the other, which was the favorite at Calcutta and in England, increase of taxation.'... The Madras famine of 1877 did not lead Lord Lytton to a reduction of expenditure and a reduction of taxes. On the contrary, under the advice of his new Finance Minister, Sir John Strachey, he imposed new taxes to create a Famine Relief and Insurance Fund.... A pledge was given to the people of India that the proceeds of the taxes would not be expended for any purpose other than that for which



they were imposed. The pledge was broken soon after it was given. In the budget of 1878-79 the grant was made; but in the budget of 1879-80 it was suspended." (DIV, 592)

Gopal Krishna Gokhale was a college teacher and a leading advocate of peaceable constitutional reform in colonial India. The first of his seven visits to England, in 1897, was to give evidence to a government committee. He was concerned (like Dutt) with such issues as whether tax revenues collected in India should be spent on British military expeditions elsewhere, whether a substantial portion of the civil-service positions in India might be filled by Indians, and whether the proceeds of the Famine Insurance Fund should be spent on relieving famine or on building railways. His written evidence was (like Dutt's) substantiated by statistics; the discussion was sometimes along the following lines:

Commissioner: "Would you really impress it on the Commission that the ... Government of India have undertaken these railways principally in the interest of English commerce and the commercial classes; is that a direct charge of yours?"

Gokhale: "...The facts are there.... Whenever a viceroy ... goes out to India,... pressure [is put] on him to construct these railways, and he makes a promise." (DGG, 47)

The committee heard him for two days, and one of its members told him, "Our minority report will be based practically on your evidence." Such was the gist of his relations to England for the remainder of his life. He revisited six times and his frustration grew as he had occasion to criticize the weak famine-relief measures in 1899, the Land Alienation Bill in 1901, etc. In 1906 he remarked:

"During the last eight years, the surpluses of the Government of India have amounted to no less a sum than Rs. 35 crores, and the whole of this money has been spent by the Government on railways, in addition to large amounts specially borrowed for the purpose.¹⁶⁶ ...Are railways everything and mass education nothing? Is improved sanitation nothing?" (DGG, 87)

Gokhale and Gandhi were dear friends for twenty years¹⁶⁷ and when Gokhale died Gandhi mourned by going barefoot for a year (CRG, 208).

166. A crore is ten million. According to a British historian (SHI 259), "By 1910, India had the fourth largest railway system in the world.... British capitalists were induced to undertake railway development by government guarantees of a fixed return on their investments, a project that by contrast cost Indians £50 million... [It]... made British India a national commodity market ... and provided a means for speedily transporting soldiers wherever in India or the world they might be needed."

167. Not just for a few minutes as depicted in Attenborough's beautiful film, *Gandhi*.

Proponents of trusteeship

I should mention here that a concept of trusteeship — whereby the rich ought to manage their property as if holding it in trust for the entire community — was salient in Gandhi's economic thinking, and that Kumarappa, having been taught as a youngster that God had given India to England in trust to civilize it (*KEW*), was impressed (before he met Gandhi) when he read, in books published by British missionary organizations, arguments to the effect that Britain had treated India "principally as a feeder [of raw materials] ... and a market for English manufacturers" and that this had caused so much poverty in India that Britain was "guilty of treason against the nation committed to its trust."¹⁶⁸

The Luddites and Marxism

The Luddites, though not economists, expressed in a way that commanded attention an opinion as to the validity of Say's Law (which they never heard of). They were early-19th-century English handloom weavers who, finding themselves out of work because of the development of power-looms driven by steam engines, began in November 1811 (this was in Nottinghamshire and they said they were led by a mythical "General Ludd"—presumably a spiritual descendent of Robin Hood) to break into factories at night with hammers and wreck the power-driven looms. The movement spread quickly and by June 1812 more than a thousand looms had been wrecked and more than 15,000 soldiers sent to put it down.¹⁶⁹ A petition to parliament in 1827 from "manufacturers [i.e. artisans], workmen and others" included the following rejoinder to pride in the development of steam-power:

"With the haggard and woe-begone skeletons of our once happy neighbors everywhere around us, this heartless and inhuman cant about 'the march of intellect and mechanical ingenuity' is as disgusting as it is wicked." (*MLE*, 50)

The Luddites' primitive way of protesting was anathema to Gandhi, but his main concern in regard to economics — unemployment due to industrial mechanization — was the same as theirs.

168. Cf. p. 11. See *BCE*, 51-54, 63-64 and 354-357 for some earlier samples of British claims — by Edmund Burke (1783), Baron Wellesley (governor of Bengal and of Madras, 1797-1805) and Lord Curzon (viceroy, 1898-1905) — of trusteeship vis à vis India.

169. *SRL*, frontispiece is a succinct narrative. The Luddites and their historical context and significance are described in many other works: *TMW*, *LHS*, etc.

Also noteworthy in this context are Thomas Worsley's description (1831) of the benefits which he expected a certain invention (by J. H. Sadler) to bestow upon the languishing British handloom weavers:

"The Saxon weavers [i.e. in north Germany]... will find themselves eclipsed. France... will be[come] an importing country. The extensive manufactures at Syria, Armenia, and Persia, and even the Chinese will be equally paralyzed, as are the calico weavers now in Hindustan." (*MLE*, 52)

—and the following comment of Karl Marx:

"The gradual extinction of the English hand-loom weavers was spread over several decades, and finally sealed in 1838. Many of them died of starvation.... The English cotton machinery produced an acute effect [also] in India. The Governor General reported in 1834-35: 'The misery hardly finds parallel in the history of commerce. The bones of the cotton weavers are bleaching the plains of India.'" (*MEC XXXV*, 434-35)

A few aspects of Marxism and of the economic thought of Karl Marx (1818-1883) himself should be mentioned here: his view of the relation between labor and wealth, his remarks on soil fertility, his concepts of alienation and of class conflict, his view of the historical role of capitalism, and the subsequent Marxist attitude toward big factories.

In regard to the relation between labor and commodities, Marx said, in his analysis of capitalism:

"If ... we leave out of consideration the use-values of commodities, they have only one common property left, that of being the products of labor....

"When [reduced to monetary values], commodities strip off every trace of their natural use-value and of the particular kind of labor to which they owe their creation, in order to transform themselves into the uniform, socially recognized incarnation of homogeneous human labor." (*MEC XXXV*, 48 and 119)

This "labor theory of value" was already quite traditional¹⁷⁰ and reflects

170. Marx attributed the founding of economic theory to William Petty (1623-1687), who regarded the "wealth, stock, or provision of the nation" as being due to past labor (*PEW*, 110) (and who said (*PEW*, 68) that "labor is the father and active principle of wealth, as lands are the mother"). Kumarappa was taught that John Locke (1632-1704) founded "the labor theory of private property" (*SLH*, 53); Locke said (*LTT* paragraphs 26-29): "God has given the world to men in common, for the support and comfort of their being. All the fruits it naturally produces, and the beasts it feeds, belong to mankind in common. Yet there must be a means to appropriate them some way or other before they can be beneficial to any particular man.... Whatever he removes out of the state that nature has left it in, he has mixed his labor with and [so] joined to it something that is his own, and thereby makes it his property

the habit of thinking implicitly in terms of a closed theoretical system.¹⁷¹ Marx's own view of the relation between labor and wealth was as follows:

"Labor is not the source of all wealth. Nature is just as much the source of use values (and it is surely of such that material wealth consists!) as labor,¹⁷² which itself is only the manifestation of a force of nature, human labor power." (MEC XXIV, 81)

Marx considered the *main* "original sources of all wealth" to be "the soil and the laborer" (MEC XXXV, 508) and, when not merely describing capitalist ideas, thought in terms of an open system in regard to soil.¹⁷³

He said that in a capitalist economy the workers have, however, no basic control of what is going on; indeed:

"The worker becomes [himself] a [relatively] cheaper commodity, the more commodities [and hence wealth] he produces [for the capitalist].... The object which labor produces, its product, [thus] stands opposed to it as an alien thing, as a power independent of the producer [i.e. the worker].... Alienation is shown [also] ... in the producing activity itself.... The worker feels miserable and unhappy.... He is at home when he is not working, and when he is working he is not at home."¹⁷⁴ (MPS, 289-92)

—and:

"Owing to the extensive use of machinery and to division of labor, the work of the proletarians has lost all individual character." (MEC VI, 490)

No man but he can have a right to [it], at least [not] where there is enough and as good left in common for others. The water in the fountain is everyone's, yet who can doubt that [the water] in the pitcher is his only who drew it out?"

171. See p. 59. In *Grundrisse* he remarked (1973 trans., 489) that what "requires explanation" is not "the unity of living and active humanity with the natural, inorganic conditions of their metabolic exchange with nature" (by calling the conditions "inorganic" he was precluding what some people nowadays call "Gaia"), but rather "the separation between these inorganic conditions of human existence and this active [human] existence"; and he said that the separation "is completely posited only in the relation of wage labor to capital." A theoretical "open system" takes account of the unity, whereas a closed one focuses on social exchanges and excludes those designated here by the word "metabolic." (See note 223 and FME, 1.)

172. Engels too regarded labor as the source "next to Nature, which supplies it with the material that it converts" (MEC XXV, 452). If I were to examine closely the relations between Marx's and Engels's thinking, I might say that Carlyle (see pp. 59-60) influenced Engels more than he did Marx (see MEM, 101-112). 173. See pp. 84-85.

174. I have used the translation in MPS but have eliminated the italicizing of certain words and have added clarifications in square brackets. Marx's concept of alienation (in German, *Entfremdung*) was unknown to Kumarappa; the first English translation of Marx's writings using the term was in DMF.

—the opposite of such alienation being engagement in a kind of work that is fulfilling even when it is most demanding:

"Really free work, for instance composing [music], ...demands the most intensive effort."¹⁷⁵

A differently derived notion of alienation was central to Gandhi's concept of religion,¹⁷⁶ and is reflected in the passage by Kumarappa, cited on pp. 44-45 above from his *Economy of Permanence*, about a kind of standard which "functions like a nose-string to a bullock" since it makes the factory worker "loathe to change places even if his principles are violated by the factory owner."

Finally I should mention some important differences between the Marxist and Gandhian views of capitalism. (a) Marx regarded it as a stage of progressive development:

"The bourgeoisie, historically, has played a most revolutionary part." (MEC VI, 486)

"Only bourgeois rule tears up the roots of feudal society and levels the ground on which a proletarian revolution is alone possible." (MCS, 45)

"The misery inflicted by the British on Hindustan is ... infinitely ... intensive.... But... can mankind fulfill its destiny without a fundamental revolution in the social state of Asia? If not,... [then] England ... [has been] the unconscious tool of history in bringing about that revolution.... [However,] the Indians will not reap the fruits of the new elements of society scattered among them by the British bourgeoisie, till in Great Britain itself the now ruling classes shall have been supplanted by the industrial proletariat, or till the Hindus themselves shall have grown strong enough to throw off the English yoke altogether."¹⁷⁷ (MEC XII, 126, 132 and 221)

—whereas Gandhi regarded it as a big historical mistake.¹⁷⁸ (b) Marx, but not Gandhi, was taken with the idea of class-conflict; and (c) the Marxists,

175. See MEC XXVIII, 530. (19th-century German dictionaries {HVW, ÖGW, KVW, SWD} show that the word "*komponieren*," which Marx used here, would normally refer to music unless the context suggested otherwise.) Marx overlooked that composing can be alienated work (e.g. setting commercial jingles). 176. See note 233.

177. This was written in 1853. Many years later, Marx and Engels asked hopefully (see LCM, 108-09): "Can the Russian ... primeval common ownership of land pass directly to the higher form of communist common ownership? Or ... must it first pass through the same process of dissolution that constitutes the historical evolution of the West?" Their answer was: "If the Russian Revolution becomes the signal for a proletarian revolution in the West, so that both complement each other, the present common ownership of land may serve as the starting point for a communist development."

178. See p. 91 (but also pp. 100-02).

but not the Gandhians, have agreed with the capitalists about big factories. This is evident in the mammoth Russian factories, in Soviet textbooks on economics,¹⁷⁹ and in the following excerpt from a "Rejoinder to Mr. Kumarappa" (1935) by the most eminent Indian Marxist:

"Decentralization ... is reactionary because it turns back the productive forces of society ...[and] means lower standards of living for the people."¹⁸⁰

Jevons, Marshall

Historians of orthodox economic theory have called William Stanley Jevons (1835-1882) "one of the most genuinely original economists who ever lived" (*SHA*, 836), and his *The Theory of Political Economy* (1871) "the first modern book on economics" (*KEB*, 284). His "Notice of a General Mathematical Theory of Political Economy" (1862) includes the first published version of a basic idea in neo-orthodox thinking about demand in the market, the idea of marginal utility.¹⁸¹ (He had another name for it.) His mathematical explanation looks thrillingly like physics; he had put a non-mathematical explanation in a letter of 1860 (*JLJ*, 151):

"[A]s the quantity of any commodity ... which a man has to consume, increases, so the utility or benefit derived from the last portion used decreases in degree."

(Thus for instance the last part of each helping in an affluent person's meal is less beneficial than the first part.) He argued, however, that even though the marginal utility of any kind of thing tends to decrease with the amount available, in some cases it does not approach zero, because "there is hardly a limit to the desire for articles of aesthetic taste, science or curiosity, when once excited" (*JPE*, iii, the part entitled "Variation in the Final Degree of Utility").

Jevons said that "labor once spent has no influence on the future value of any article" (*JPE*, 164). This (among other things) made him unorthodox, but

179. For instance: "Socialism creates a much higher labor productivity than capitalism. It achieves this ... by replacing manual labor by mechanized labor.... The spread of progressive methods peculiar to large-scale production ... are crucial in ensuring the steady rise in the productivity of social labor." (*LSC*, 318-322)

180. See p. 33.

181. *BMR* assesses in detail the "marginal revolution." In *DET* an Indian economist divides the history of capitalist economic thought into three epochs, "each giving rise to a new set of questions, and hence to new theories for answering them": (1) "classical political economy"; (2) "marginalist economics ('neoclassical', as it is often misleadingly called)"; and (3) Keynesian economics (concerned with "decadent capitalism" needing "a prop if it were to be sustained").

182. See pp. 69-70.

also helped to discredit Marx among supply-and-demand oriented economists who, then as now, attributed the labor theory of value to Marx.¹⁸²

By far the most eminent British economist during Kumarappa's London years was Alfred Marshall (1842-1924),¹⁸³ professor of political economy at Cambridge from 1885 to 1908 and inventor of many prestigious theoretical concepts like "elasticity of demand" and "consumer's surplus." Marshall often expressed concern about fairness and about the welfare of the working classes,¹⁸⁴ but in his technical work was far less interested in unemployment¹⁸⁵ due to depressions etc. than in how market prices could be explained theoretically as being due to a more or less grand equilibrium involving cost of production on the supply side and the marginal-utility principle on the demand side. (This aspect of his work did not interest Kumarappa, however.)

Marshall believed that "economic development passes generally through three stages, in the last of which manufacture predominates" (*MIT*, 697). He acknowledged *pro forma* that:

"Not all of those characteristics of manufacture to which its importance is owing are of high quality. The substitution of repetition work in massive standardized production... is not an advance, from the human point of view, over skilled handicraft; it increases man's power over matter, but it may diminish his power over himself." (*MIT*, 697)

But he was (unlike Gandhi and Kumarappa) enthusiastic about machinery, not only because it "relieves the strain on human muscles" and because he believed that it "takes over sooner or later all monotonous work in manufacture," but also because "complex machinery increases the demand for judgement and general intelligence" (*MPE*, 261-62, 257). He did not consider, since he dealt only with closed theoretical systems,¹⁸⁶ the ecological consequences if that demand were to outstrip the supply, nor the analogous problem in the wake of science and industry developing weapons of mass destruction. He simply regarded education as "a national investment" and said that the "most valuable of all capital is that invested in human beings." (*MIT*, 216, 564)

183. *CEE* includes devoted and informative chapters on his methods, his parents etc.

184. *KMM*, i, emphasizes this; further substantiation is in *PMM*.

185. The index to the 1700-page variorum edition of Marshall's *Principles of Economics* lists only three references to "Employment, inconstancy of," and none of the passages referred to is substantial.

186. For a good read about him in this regard see *RHQ*, the Introduction and Chapter 1.

While accepting that the cost of labor affects prices, Marshall rejected the "iron law of wages" in its earlier forms.¹⁸⁷ He believed instead that everyone would eventually become more and more affluent. Yet his faith in progress due to capitalism was tempered slightly by an acknowledgement (*MPE*, 37, iii, conclusion) that "every change in social conditions is likely to require a new development of economic doctrines." In the preface to one of his last books, *Industry and Trade*, he wrote:

"I see [now]... a broader and firmer foundation for socialistic schemes than [I saw before].... But it has seemed to me that those have made most real progress towards the distant goal of ideally perfect social organization, who have concentrated their energies on some particular difficulties in the way, and not spent strength on endeavoring to rush past them. Accordingly the present volume is in the main occupied with the influences which still make for sectional and class selfishness [and] with the limited tendencies of self-interest to direct each individual's action on those lines in which it will be most beneficial to others."

This is the only book of Marshall's that Kumarappa cited explicitly.¹⁸⁸

Neo-orthodox theory

Neo-orthodox economists retained some version of the first three premisses listed on pp. 58-59 — "economic man,"¹⁸⁹ the "invisible hand"¹⁹⁰ and the restriction to closed systematic models — but usually allow that Say's Law is invalid and, like Marshall, reject (at least in theory) the "iron law of wages." Unlike Marshall, however, they tend to believe that their equations have the same kind of validity, the same kind of relation to reality, as the laws of physics.¹⁹¹ One such economist was Jevons's son, H. S.

187. See p. 59.

188. See p. 39 for an implicit citation of *MPE*.

189. *BCL* and *EEM*, i survey some modern versions of this precept. Some characteristically broad formulations not mentioned in *BCL* are that "the first principle of economics is that every agent is actuated by self-interest" (*EMP*, 16) and that "Whether it be a question of becoming addicted to the use of drugs, of stealing, of killing, marrying, having children, of being unfaithful to one's spouse or getting a divorce, the individual brings about his or her choice by rationally comparing costs and benefits, aiming at the maximization of personal satisfaction. For example, in the case of crime, a rational agent compares such activities' benefits with their costs, with particular regard for the probability of being captured and the severity of the resulting punishment. Only a few psychopaths do not conform to the rule." (*BDB*, 183-84)

190. *HIH* is a recent discussion of the extent to which some adaptation of Smith's concept of the invisible hand may be valid.

191. *KDE* is a recent assessment of this doctrine.

Jevons (1875-1955), who was a professor in India from 1914 to 1923 (*BSW*, 187) and founded the *Indian Journal of Economics*.¹⁹² He exchanged views with Gandhi at a public meeting in 1916 and corresponded with him afterwards. At the meeting, Gandhi took exception to H. S. Jevons's view that economic theory is scientifically true but has to be morally neutral (*GCW XLVIII*, 316-17). Jevons's letter to Gandhi suggested that (a) Indians should fight on England's side in the current war and (b) the colonial salt-tax should be increased; Gandhi's response is cited in Section 2.¹⁹³

Kumarappa's most provocative and stimulating teacher was, as we have seen in Chapter 1, a crusty seeker of objective scientific validity in economic theory.¹⁹⁴

In the 1930s Lionel Robbins, "who, with Keynes, dominated British economics in the inter-war period" (*OLR*, 1), cited an anonymous Brahmin's statement that he (the Brahmin) was "ten times as capable of happiness as that untouchable over there" (*RIC*, 635) and argued consequently that to regard different people's basic needs as being of equal importance would be, alas, unscientific, though ethical. Neo-orthodox economists have since reduced this line of thought to a doctrine that there are no objective human needs, but only desires, of which the market provides the only clear measure. Kumarappa would have rejected the doctrine if he had encountered it; he would have disbelieved that people starving and unable to buy bread, freezing to death and unable to buy heating, etc., don't desire and need them, and he often made arguments similar to those in the passage from Pigou cited on p. 81.

Given the habitual equating of scientific economic thought with monetary reckonings, neo-orthodox economists suppose that the only scientific way to assess the negative effect of ecological degradation upon people as yet unborn, and hence unable to bid in the current market, is by "discounting,"¹⁹⁵ that is, predicting a monetary cost at a specified future date and

192. H. S. Jevons worked later at the University of Rangoon, and then for the emperor of Ethiopia.

193. See pp. 98-99.

194. See pp. 11-14.

195. The idea goes back to an article of 1931 according to which "The discounting of future values... may be challenged on the ground that future pleasures are ethically equivalent to present [ones] of the same intensity. The reply to this is that capital is productive [and] that future pleasures are uncertain in a degree increasing with their remoteness in time" (*HEE*, 145). (The author overlooked that the effects of the produc-

then reckoning how much less — this is the discounting — would have to be set aside now (e.g. by putting it in a savings account) in order to swell to it by the date in question, given an arbitrarily posited rate of interest and assuming that it would be paid. A recent champion of American capitalism who believes (unlike Gandhi¹⁹⁶ and unlike dieters) that "no sensible person has ever set the goal of reducing his or her own consumption" (TFC, 315), has pointed out nonetheless, in regard to the application of discounting to ecological problems, that:

"Using capitalistic decision rules, the answer to what should be done today to prevent such problems is very clear — do nothing. However large the negative effects fifty to one hundred years from now might be, their current discounted net present value [to the corporation] is zero. If the current value of the future negative consequences is zero, then nothing should be spent today to prevent those distant problems from emerging. But [even] if the negative effects are very large fifty to one hundred years from now, by then it will be too late to do anything to make the situation better since anything done at that time could only improve the situation another fifty to one hundred years into the future. So being good capitalists, those who live in the future, no matter how bad their problems are, will also decide to do nothing. Eventually a generation will arrive who cannot survive in the earth's altered environment, but by then it will be too late for them to do anything to prevent their own extinction." (TFC, 268)

Institutional economics

I have described the *Kathedersozialisten* as exponents of normative economics because their influence led in Germany to the first steps toward a modern welfare state.¹⁹⁷ But now let us consider that it can be argued merely on intellectual grounds, apart from ethical concerns, that (a) the orthodox "economic man" premiss (i.e. that everyone seeks exclusively to increase his own wealth) is psychologically inadequate¹⁹⁸ because economic behavior is substantially affected by the cultural milieu, and indeed (b) every economic system is part of a more comprehensive social one.¹⁹⁹

tivity of capital are likewise uncertain.) PTD is a substantial recent discussion with a detailed bibliography; PWD is a recent symposium in which most of the participants admit that intergenerational equity is involved.

196. "Civilization in the real sense of the term," according to Gandhi, "consists not in the multiplication but in the deliberate and voluntary restriction of wants. This alone promotes real happiness and contentment." (GSW IV, 230)

197. See p. 61.

198. See pp. 157-58.

199. However, an "institutional economist" may as such be content with a closed-system model of the economy (dealing only with social relations and not comprehensively with material relations between humankind and Nature).

200. See pp. 7-8.

We have seen²⁰⁰ that Kumarappa studied sociology as well as economics, that the lectures he attended on the history of economic thought included some discussion of relations between economic theories and contemporaneous socio-economic organization, and that the professor who gave them, E. R. A. Seligman, was influenced by the *Kathedersozialisten* (which he called "the German historical school") and declared in the first lecture that:

"Social science ... [deals] with mutable things.... As human beings live the system lives and the system changes. An ... investigator is necessarily influenced in such a science by ... the institutions of his own age and his own country."

This abstract use of the term "institution" for informal as well as formal aspects of social systems is salient in the label "institutional economics," which is applied to a vein of thought traced back customarily²⁰¹ to another American economist, Thorstein Veblen (1857-1929). Veblen was himself influenced by the *Kathedersozialisten* — and was in turn a teacher and close friend of Kumarappa's other main professor (besides Seligman) in New York, H. J. Davenport. Veblen spoke of "evolutionary" or "cultural" economics, and these terms hint at the daunting challenge in institutional economics of integrating historical and analytical information.²⁰² One reason for using the term "institutional," however, is that all impingements of will-power upon an economy — which may ensue from greed as well as from normative economic thinking — have to operate through institutions of some kind. Moreover, whereas "pure" economics can produce equations for theoretical relationships among abstract things like "gross national product" and "capital output," institutional economics describes the actual patterns, in various cultures, of consumption, investment, etc.

Earlier I described Seligman as having been an historical link between Bismarck's and Franklin D. Roosevelt's versions of the welfare state.²⁰³ Now

201. The idea is implicit in Marshall's precept (see p. 74) that every change in social conditions is likely to require a new development of economic doctrines.

202. See apropos MDA. Robbins (see p. 75) spoke in 1932 of "the futility of these grandiose projects" that had failed to yield even "one quantitative generalization of permanent validity" (RNS, 103-04). (But of course it is harder to claim generalizations of allegedly permanent validity if one is describing evolutionary phenomena than if one postulates "perfect markets" and the like.) See also YSS and BIE.

203. See pp. 18-19. Roosevelt in his nearest approach to an ideological speech (albeit drafted by a ghost-writer; see FDR, 292-95) declared in 1932 his "faith in the [inven-

I should mention that one of the three members of Roosevelt's "Brains Trust" of 1932 {*LRR*, 22-29; *MAS*, 14-24, 83; *ANB*}, the law professor Adolf Berle, was at that same time writing in collaboration with a "post-Veblenian institutionalist" {*GCT*, 70} a book on modern corporations and private property {*BMC*}, and that the economist in the Brains Trust, Rexford Tugwell, is also regarded as a post-Veblenian institutionalist {*GCT*, 62}. Indeed, according to a recent historian of economic thought:

"In the 1920s ... institutional economics ... was ... in departments of economics in the United States ... as popular, influential and powerful as neoclassical economics.... American institutionalism was [in due time] responsible for many crucial developments in economic science ... [e.g. in regard to] consumer behavior ... transaction costs ... the role of education and learning in economic growth ... the interface of economics with law ... and many other [topics]." {*HJ*, 397}²⁰⁴

I needn't describe in detail Veblen's or Tugwell's thinking,²⁰⁵ because Kumarappa was, as far as I can tell, not directly influenced by them.²⁰⁶ Like the Marxists, they regarded societies and thus economies as constantly evolving,²⁰⁷ and saw in technological developments the basic cause of the evolution (whereas Kumarappa did not say that technology has caused the broad historical trend which he discerned from "predatory" to "parasitical" to "enterprising" to "socialist" to "service-oriented" economies). Unlike the Marxists (and unlike believers in the "invisible hand"), they

tive] capacity of man to control," by means of "bold, persistent experimentation," the "great economic and social machine" of the nation. {*FDR*, 293}

204. Robbins {*loc. cit.* in note 201} lamented in 1932: "We have had the Historical School. And now we have the Institutionalists ... and in recent years ... they have ... had a wide area of power in America." According to *SMC*, 247, "With Roosevelt's New Deal, many leading institutionalists ... were caught up in administrative tasks."

205. *GMT* and *GCT* survey Tugwell's main ideas. The literature on Veblen and his intellectual legacy includes *CJE* XXII/4, *DLC*, *DTV*, *ETV*, *GCT* (ch.ii), *GMT*, *JTV*, *RIE*, *SMC* 129-58, *STV*, *TLV*, *TVC*, *TVI*, and the articles anthologized in *BTV*, *DVA* and *WTV*; *TVG* is a substantial bibliography (as of 1985).

206. Although Tugwell was a professor at Columbia University when Kumarappa studied there, and although a copy of the 1953 paperback edition of Veblen's most famous book (*VLC*) is in the library at Gandhiniketan Ashram (see note 4), I have found no references to Veblen or to Tugwell in Kumarappa's writings.

207. Tugwell not only taught graduate-level economic theory but also helped teach a course, entitled "Contemporary Civilization," integrating various social sciences in a "detached approach to industrialism and [to] the contemporary problems" entailed by it. {*NRT* 37} He was initially taken to see Roosevelt because he was "a first-rate economist who had pushed on beyond the frontiers of stiff classicism" {*MAS*, 15}.

discerned no predictable outcome, but instead regarded human agency as determining each society's fate. They were mainly interested in economic and social problems in the USA due to the rise of modern industry. Tugwell, though more optimistic than Veblen, remarked in 1927 (the year when Kumarappa arrived in the USA, and two years before the onset of the Great Depression) that even though the USA had attained the "highest [average] living standards ever known to the race," still there were

"certain patent disadvantages of the present which no one, I think, would defend unless he were utterly fatuous. There is poverty, there is child labor, there is waste, there is war, there is the terrific grinding monotony of machine-substitution, there is the filth and disorder of our cities; and all of these grow more or less out of the industrial system as we have it...."

"[We ought to] grow away from ... [these] ugly concomitants of industrialism... by taking industry as we find it and shaping it reasonably and slowly but also forcefully toward what seem, for the time being, better arrangements. This would be done in great decisions and in small ones, by consumers and producers each in their own way; but it would be better done if we worked to some plan, some expectation by which results could be judged. The first condition of such achieving such a plan... [is] the recognition of present trends so that we may have some assurance that we are working for an attainable result and not wasting effort on Utopian air-castles.

"These trends are so important that, unless I am utterly mistaken, they will result in an almost complete remaking of American economic life. In the clear view of them which is emerging all the plans for our future must be made." {*TC*, 266-67}²⁰⁸

Veblen always distinguished between socially "serviceable" institutions—underpinned psychologically by parental instincts and a sense of workmanship²⁰⁹—and biologically "disserviceable" ones whereby a cultivated individualism causes the acquisitive and socially predatory drives to be privileged; but Kumarappa eventually (in the 1940s) overcame his own earlier, dualistic distinction between "wolf-pack" and "sheep-flock" societies. Notwithstanding such differences, however, a kind of institutionalist thinking is apparent in Kumarappa's characteristic remarks to the effect that one should not become so "intoxicated with Western [economic] doctrines" as to assume that people in India would act "in the same way as do Westerners" {*KGB*}; that:

208. This is how the book ends. Tugwell later provided to Roosevelt (upon request) his ideas about details of implementation, and was described by a knowledgeable journalist in 1933 as "the philosopher, the sociologist, and the prophet of the Roosevelt Revolution, as well as one of its boldest practitioners." {*LRR*}

209. His concept of this was vague. In the Introduction to his most systematic theoretical essay, *The Instinct of Workmanship and the State of the Industrial Arts*, he said that

"It is not easy for one steeped in Western economics to appreciate ... variations from accepted [Western] formulas ... largely due to the unique course of Indian history and the standard of values developed as part of [India's] culture and religion" {OEB 29}

—and that:

"Our forefathers ... tried to grapple with problems ... similar to the ones that we are faced with.... We have evidence of this in such institutions as the joint family system, [the] fragmentation of land and [the] caste system.... These ... systems have no doubt operated in a way not contemplated by the originators, but nevertheless we cannot afford to ignore the useful functions they have performed." {KTB, 2-3}

And indeed the Gandhian concept of self-sufficiency — to which Kumarappa subscribed whole-heartedly — was an institutional prescription.

Early 20th-century welfare economics²¹⁰

The term "welfare economics" implies explicitly normative economic thinking, and economists of this type pay serious attention to social statistics in regard to unemployment, poverty, crime, health, etc. However, Western "welfare economists" have tended to share with the neo-orthodox a faith, which Kumarappa did not share, in the socially beneficial nature of economies of scale in mechanized industry. Some of the main representatives of welfare economics have been Pigou, Keynes (to a certain extent) and, more recently, Amartya Sen (who is discussed in Section 4).²¹¹

Arthur C. Pigou (1877-1959) succeeded Marshall at Cambridge and is best known for his *The Economics of Welfare* (1920). He heeded the difference between monetary and economic facts, not only by distinguishing between "social" and "private" net product (the private one consisting of that which

there is no such instinct biologically — and that "the habitual elements of human life change unremittingly and cumulatively, resulting in a continued proliferous growth of institutions. Changes in the institutional structure are continually taking place in response to the altered discipline of life under changing cultural conditions" (even though "human nature remains ... the same"). {VTW, 18}

210. This should not be confused with "New Welfare Economics," according to which the "Pareto optimum"—a theoretical ideal (devised by Vilfredo Pareto, 1906) that is achieved when no one can become richer without someone else becoming poorer—provides an objective standard of perfection in an economy. Kumarappa never criticized this standard. Perhaps he never heard about it. From the point of view of social values it is most notably defective because it is met when everyone is starving except a single immensely rich person whose annual income would be slightly less if the others were all well nourished.

211. Hobson (see p. 60) is also in this category.

is "capable of being sold and the proceeds added to the earnings of the person responsible for the unit of investment" {PE, 151}), but also by calling attention to some errors due to supposing that the "national dividend" consists of only those goods and services which are sold for money:

"If a farmer sells the produce of his farm and buys the food he needs for his family in the market, a considerable amount of produce enters into the national dividend [according to that definition] which would cease to enter into it if, instead of buying things in the market, he held back part of his own meat and vegetables and consumed them on the farm. Again, the philanthropic work done by unpaid [people]..., the scientific work of disinterested experimenters, and the political work of many among the leisured classes, which at present do not enter, or, when there is a nominal payment, enter at much less than their real worth, into the national dividend [reckoned in terms of money], would enter into it [properly] if those people undertook to pay salaries to one another.... Yet again, the services rendered by women enter into the dividend when they are rendered in exchange for wages whether in the factory or in the home, but do not enter into it when they are rendered by mothers and wives gratuitously to their own families. Thus, if a man marries his housekeeper or cook, the national dividend is diminished.... It is a paradox, lastly, that the frequent desecration of natural beauty through the hunt for coal or gold, or through the more blatant forms of commercial advertisement, must, on our definition, leave the national dividend intact, though, if it had been practicable, as it is in some exceptional circumstances, to make a charge for viewing scenery, it would not have done so." {PE, 32-33}

Pigou expressed some concern about ecological degradation along with the other "external" costs of the pursuit of private wealth:

"Sometimes people ... [use] methods that, as against the future, [cost] much more than they themselves obtain.... Fishing operations so conducted as to disregard breeding seasons, thus threatening certain species of fish with extinction, [and] farming operations so conducted as to exhaust the fertility of the soil, are ... instances in point....

"Nobody, of course, holds that the State should force its citizens to act as though so much objective wealth now and in the future were of exactly equal importance.... But there is wide agreement that the State should protect the interests of the future in *some degree* against the effects of our ... preference for ourselves over our descendants.... It is the clear duty of Government, which is the trustee for unborn generations as well as for its present citizens, to watch over, and, if need be, by legislative enactment, to defend, the exhaustible natural resources of the country from rash and reckless spoilation." {PE, 28-30}

But it seems quite likely that Kumarappa never read Pigou attentively;²¹² I suppose this is why he never recommended to Nehru the use of such "Pigouvian taxes" and bounties.²¹³

212. See p. 17.

213. Pigou had got the idea from Marshall (see MPE, 472-74).

John Maynard Keynes (1883-1946) also taught at Cambridge, and became in English-speaking parts of the world the most famous economist of the first half of the 20th century. One of his main concerns was unemployment in highly industrialized societies. Having found Say's Law²¹⁴ invalid, he said that government should compensate, by public expenditures, for shortfalls of consumer demand²¹⁵— and meanwhile should encourage low interest rates, because:

"The psychology of the community is such that when aggregate [i.e. total] income is increased, aggregate consumption is increased, but not by so much as income. Hence employers would make a loss if the whole of the increased employment were devoted to satisfying the increased demand for immediate consumption. Thus to justify any given amount of employment, there must be an amount of investment sufficient to absorb the excess of total output over what the community chooses to consume when employment is at the given level.²¹⁶ The inducement to invest will be found to depend on the relation between the marginal efficiency of capital [how much profit can be made] and the rates of interest on loans [how much it costs to borrow for investment]." (KTE, 27-28)

Prehistory of open-system economics

Whereas orthodox economists describe their work as "scientific" by analogy with physics (because both disciplines make use of mathematics), the study of ecological economics actually draws upon the natural sciences

214. See p. 59.

215. The concept of a shortfall in consumer demand is based in part on the idea that families which haven't been impoverished are to some extent hoarding rather than spending their money (perhaps because of worry about future prospects).

Keynes is reported (KWD, 261) to have said in 1933: "Ideas, knowledge, science, hospitality, travel — these are the things which should of their nature be international. But let goods be homespun whenever it is reasonable and conveniently possible." This idea was never salient, however, in his writing.

216. According to neo-orthodox theory when Kumarappa was a student, Say's Law is valid and therefore an economy free of any government regulation can never get stuck in an unbalanced pattern of accumulation (e.g. with massive unemployment due to a deficiency of aggregate demand). Within Kumarappa's lifetime some Keynesians undertook to show by technical analysis (see for instance RAC) a near impossibility of full realization of the potential surplus in a capitalist economy. But others (see for instance SIA) have held that clever fiscal and monetary policies by the government (e.g. tax cuts and manipulating interest rates) can make the economy work as if Say's Law were valid. Keynes himself said (KTE, 378) that "if our central controls succeed in establishing an aggregate volume of output corresponding to full employment as nearly as is practicable, the [neo]classical theory comes into its own again from this point onwards."

since its theoretical models are "open," i.e. envisaging interactions, the material consequences of which are taken into account, between society and nature. I will say more about this in Section 4. The history of scientific ecological studies²¹⁷ is broader, however, than the history of open-system economics. For my immediate purpose it will suffice to mention here that when open-system economists try to reckon the sustainability of a system, they tend to distinguish between (a) depletion of non-renewable natural resources and (b) economically damaging pollution of the natural environment.

In Western culture the concept of sustainable economic development can be traced back — in regard to supplies of wood — through Carlowitz's *Selvicultura Oeconomica* (1713) to Colbert's *Grande Ordonnance* of 1669 (in behalf of Louis XIV for a "réformation des forêts" to ensure the supply for manufacture of ships) and John Evelyn's *Sylva* (1664, commissioned by the Royal Society at the request of the "principal officers and commissioners of the navy" {ES, title page}).²¹⁸

Evelyn's *Fumifigium* is as clearly about pollution as *Sylva* is about depletion. And, William Blake in 1804 referred to industrial pollution in a famous poem recalling a legend that Jesus had visited England; it begins as follows:

And did those feet in ancient time
Walk upon England's mountains green;
And was the holy Lamb of God
On England's pleasant pastures seen!

And did the Countenance Divine
Shine forth upon our clouded hills?
And was Jerusalem builded here
Among these dark Satanic mills? 219

217. Kumarappa did not use the word "ecology." It is said to have been coined in 1866 by Ernst Haeckel (HGM), to whom it meant relations between biological organisms and the "external world." The meaning has since broadened to include ecosystems (e.g. lakes, forests, the Earth). DHE is a general history of the modern science of ecology. SEM outlines its history (from 1895 to 1975) in Sweden. These books show that the most substantial early ecological studies focussed on shores, lakes and their environs. OFE (1952) advanced the academic recognition in the USA of ecology.

218. *Sylva* is not "pastoral," but substantial and down to earth. In a prefatory note the author refers to "our late prodigious spoilers, whose ... devastation of so many goodly woods and forests have left an infamy on their names and memories." An appendix discusses fruit-trees in relation to cider.

(219. See p. 84.)

(Kumarappa may have known this text, as he was living in London when Hubert Parry's melodic setting of it,²²⁰ which Labor Party delegates normally sing at the conclusion of their jamborees, was first performed.)

In the 1860s, W. S. Jevons wrote, in a book about coal as an exhaustible domestic resource for British industry:

"To part in trade with the surplus yearly interest [in crops] of the soil may be unalloyed gain, but ... our mineral wealth is ...capital... that will never come back." (JCQ, 371)

—and concluded:

"If we lavishly and boldly push forward in the creation and distribution of our riches, it is hard to overestimate the pitch of beneficial influence to which we may attain in the present. But the maintenance of such a position is physically impossible. We have to make the momentous choice between brief greatness and longer continued mediocrity."²²¹

The book was highly praised for a while; but "mediocrity" is such an unappealing option to people engaged in capital expansion that an *ad hoc* assumption that technological innovations can always somehow overcome such scarcity problems has habitually been invoked to head off the development of disturbing open-system models.

Meanwhile Justus von Liebig, a leading chemist (HLJ), included, in the 156-page introductory section of the seventh edition (1862) of his treatise on agricultural and physiological chemistry, a substantial discussion of soil depletion and its relation to international trade. He said that the currently increasing need to import, from outside Europe, fertilizing material for European fields was

"proof of their increasing impoverishment.... English agriculture can serve as an example.... The whole enormous mass of fertilizing materials which England introduces annually [into her fields] flows, for by far the most part, in her rivers out to the sea.... The [really] bad [thing] is that this process of [large-scale ecological] self-destruction is taking place in all the European lands, even if not to so great an extent as in England. In the big cities of the Continent, the authorities spend large annual sums [to bring in organic materials from the countryside and to dispose of them locally] in order to make

219. The last of the four stanzas is: "I will not cease from mental fight, / Nor shall my sword sleep in my hand, / Till we have built Jerusalem / In England's green and pleasant land."

220. The setting is entitled "Jerusalem." The poem is not in Blake's book of that name, but in the preface to his *Milton, A Poem in Two Books*.

221. JCQ, 376. DWE extends the argument to fossil fuels in general, globalizes it, and updates it to 2000.

unattainable for agriculture the conditions [necessary] for the restoration and preservation of the fruitfulness of [rural] fields." (LCA, 125-129)

And he said that English agriculture involved a form of international "robbing" (*Raub*), based as it now was upon importing hundreds of tons of fertilizers each year.

Before reading this book, Karl Marx had believed that because of the "subjection of Nature's forces to Man ... [for instance by the] application of chemistry to ... agriculture" (MEC, VI, 489), the theory that "the soil ... becomes relatively less fertile" was invalid:

"With the advance of civilization, ever poorer types of soil are brought into cultivation. But ... as a result of the progress of science and industry, these poorer types of soil are relatively good as against those previously regarded as good." (MEC, XXXVIII, 258)²²²

But after studying von Liebig's concept of the "circulation of matter" (*Stoffwechsel*) in agriculture, he came to a different conclusion:

"Capitalist production, by collecting the population in great centers,... disturbs the circulation of matter between man and the soil, i.e. prevents the return to the soil of its [constituent] elements consumed by man in the form of food and clothing; hence it violates the conditions necessary to lasting fertility of the soil.... Progress in capitalist agriculture is a progress in the art, not only of robbing the laborer, but [also] of robbing the soil; all progress in increasing the fertility of the soil for a given time, is a progress toward ruining the lasting sources of that fertility."²²³

Yet this concern about depletion remained a subordinate aspect of his thinking,²²⁴ and in the Marxist tradition was crowded out by the focus on making revolution and then on meeting national production goals.²²⁵

222. See PNA.

223. MEC XXXV, 506-07. Foster (FME; see also FMJ) and others translate *Stoffwechsel* as "metabolism," and Foster notes that Marx upon reading FKP had remarked (MEC XLII, 559) that agricultural "cultivation, when it progresses spontaneously and is not consciously controlled,... leaves deserts behind it — Persia, Mesopotamia etc., Greece." (See HOE, xiii-xv for an expert modern account of this historical phenomenon.)

224. Foster cites (FME, 163) Marx's observation that London (where Marx in 1849 made his home for the rest of his life) could "do nothing better with the excrement produced by 4½ million people than pollute the Thames with it, at monstrous expense." He seems thus to have been more alert to the loss of fertilizer and to the monetary costs of sewage disposal than to the effects of the sewage upon people in the city. Already in the 1850s, however, John Snow proved (SC) that a cholera epidemic in London was due to pollution of the Thames. (CRS is a classical account of unsanitary conditions in mid-19th-century London; BLL covers the late 19th century in detail.)

Engels took a more comprehensive view of depletion and pollution when he said

In the USA during the presidency (1901-08) of Theodore Roosevelt and afterwards, Gifford Pinchot (1865-1946) established and directed the National Forest Service (a government agency) and publicized resource depletion with a view to making it a politically viable issue among people of different economic classes. His outlook was like this:

"The first principle of conservation is development, the use of the natural resources now existing on this continent for the benefit of the people who live here now. There may be just as much waste in neglecting the development and use of certain natural resources as there is in their destruction.... Coal is in a sense the vital essence of our civilization. If ... by preventing waste, there can be more [sic] coal left in this country after we of this generation have made every needed use of this source of power, then

that "The present poisoning of the air, water and land can be put to an end only by the fusion of town and country; and only such fusion will change the situation of the masses now languishing in the towns and enable their excrement to be used for the production of plants instead of for the production of disease." (*MEC* XXV, 282) His *The Condition of the Working Class in England in 1844* describes at length the fact, which advocates of the factory system had already conceded in the 1830s, that "the high rate of mortality in Manchester" (the leading factory-town in those days) was due to a "want of drainage, ventilation, etc." (*MEM*, 54). Though not expert in bacteriology as it developed in the latter half of the century, Engels mentioned food poisoning as well as several instances of ecological depletion when he said (in a passage first published in 1876): "Let us not flatter ourselves overmuch on account of our human victories over Nature. For each such victory, Nature takes its revenge on us. Each victory, it is true, in the first place brings about the results we expected, but in the second and third places it has quite different, unforeseen effects which only too often cancel the first. The people who, in Mesopotamia, Greece, Asia Minor and elsewhere, destroyed the forests to obtain cultivable land, never dreamed that by removing along with the forests the collecting centers and reservoirs of moisture, they were laying the basis for the present forlorn state of those countries.... Thus at every step we are reminded that we by no means rule over Nature like a conqueror over a foreign people, like someone standing outside Nature — but that we, with flesh, blood and brain, belong to Nature, and exist in its midst, and that all our mastery of it consists in the fact that we have the advantage over all other creatures of being able to learn its laws and apply them correctly." (*MEC* XXV, 461-62)

Maybe the reason why *economists* did not yet ponder epidemics due to pollution is that the idea of "human capital" would emerge only after businessmen began to value educated and healthy employees. (See *apropos* pp. 73 and 117.)

225. Policy makers in the USSR ignored *VMB*, for example, and by the 1980s "Eastern Europe had become ... an ecological disaster zone of dying rivers and barren forests, grimy cities, crumbling monuments and disease-ridden humans. It pumped out roughly double the amount of sulphur dioxide emitted by the European Community; East Germany's alone was four times that of the Federal Republic." (*MDC*, 364)

KEM examines late-20th-century "ecosocialist" thinking.

we shall have deserved well of our descendants. ...The first duty of the human race is to control the earth it lives upon." {*PFC*, cited in *WAE*, 85-86}

From such a point of view,²²⁶ ecological degradation is mainly seen to detract from the outdoor amenities of affluent living (picnics, scenery etc.), and a proper response to the problem is seen in some government-protected parks, some modest Pigouvian taxes, and some nostalgia (as of an adult for childhood joys) for a pastoral world.

We have seen how Kumarappa's perspective differed. His most salient reference to depletion is on the first page of the main text of his best-known book {*KEP*}:

"The world possesses a certain stock or reservoir of such materials as coal, petroleum [and] ores or minerals like iron, copper, gold etc. These, being available in fixed quantities, may be said to be 'transient,' while the current of flowing water in a river or the constantly growing timber of a forest may be considered 'permanent' as their stock is inexhaustible in the service of man if only the flow or increase is taken advantage of."

And he was (as we have seen) not only concerned about the political consequences of competing for access to non-renewables:

"Basing our life pattern on the economy of permanence paves the way for world peace, while the other [kind of economy, based on dwindling sources of consumable energy and raw materials] leads to disharmony, unhealthy competition, enmity and world wars." {*KEP*, 10-11}

—but also about potentially deadly consequences of pollution:

"The main trouble with man arises out of the fact that he is endowed with a 'free will' and possesses a wide field for its play. By exercising this gift in the proper way he can consciously bring about a much greater coöperation and coördination of Nature's units than any other living being. Conversely, by using it wrongly he can create quite a disturbance in the economy of Nature, and in the end destroy himself."

One study of the history of ecological economics {*MAE*}²²⁷ has shown how a series of writers going back to 1880 {*PSU*, *SMG*}, by reckoning in terms of consumable energy (e.g. that which is used to make the temperature inside a building more comfortable than outside), have treated as theoretically commensurate a broad range of things which are overlooked in monetary reckonings but are taken account of in open-system economics. The author of the study points out that production in "over-developed" countries costs more energy than elsewhere, and indeed agriculture with petrol-driven

226. *CPD* includes a good account of Pinchot's work. (Start from page 402 in the index.)

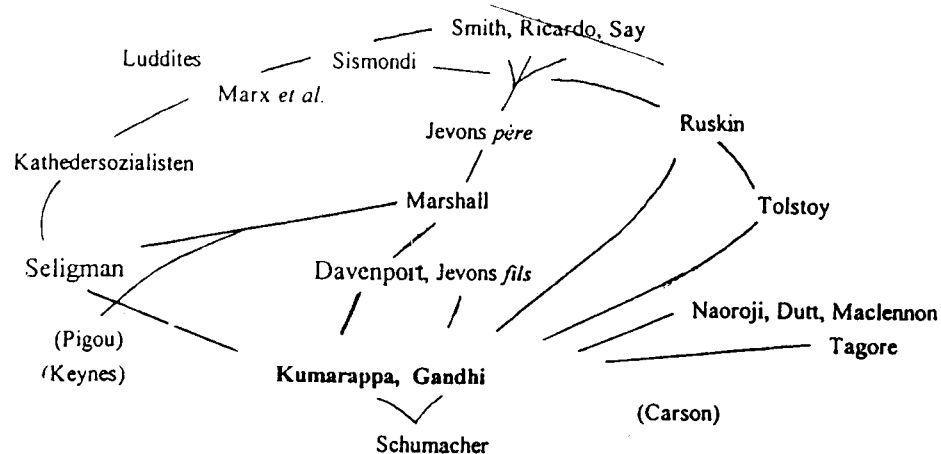
227. See *MEP*, 18-21 for a brief abstract in a more recent book by the same author.

machines and factory-made fertilizers consumes more than it yields—and that "this could have been common knowledge for a long time," had it not been for "the poor academic and non-academic reception of human ecological energetics and ecological economics." He wonders why they had such a poor reception, why "no political use has been made of their findings," and why one "may legitimately put the question today as to whether such political use is about to be made, in a new ecological narodism" (*MAE*, 247). (The *narodniks* — populists — were Russian socialists who sought a political awakening of the peasant masses. The "Land and Freedom" movement of the 1870s was populist.)

Kumarappa advocated an ecologically oriented populism, but made no such reckonings. He saw the economy as an open system, but did not think in terms of the Law of Conservation of Energy. He published (in *GUP*) articles on agricultural chemistry, and he warned often against "merely placing tons of [chemical] fertilizers in [the] hands of farmers [in India] who have not been accustomed to the use of such materials and who have no means of analysing the soil,"²²⁸ but he did not participate in the maturation of ecological economics which has begun to take place since the publication in 1962 of Rachel Carson's *Silent Spring*.

Summary

The following chart shows some lines of historical development in economic thought forming a background to Kumarappa's and Gandhi's ideas:



228. See pp. 38 and 57 for evidence that he did not oppose the use of artificial fertilizers, but only their indiscriminate use.

SOME OF GANDHI'S VIEWS

We should sample Gandhi's ideas about economics²²⁹ enough to get a fair sense of their relation to Kumarappa's. It is tempting to describe them as part of a comprehensive philosophy, but I think that would involve too much distortion, because Gandhi was a man of action, not an academic on the lookout for consistency among his statements made in different contexts.²³⁰ We should instead consider (a) how his collaboration with Kumarappa is related to his long political career, and yet also (b) the fact that underlying his views on economics were some traditional Hindu doctrines of the human soul and of cosmic and social order which are, in effect, antithetical to the orthodox Western economists' doctrines of economic man and the invisible hand.

(a) Gandhi's 54-year-long political career was about other things besides getting India's British rulers to give her up. Indeed for many years he was faithful to the Empire and sought merely to win civil rights for his fellow subjects of Indian birth in South Africa; and even when he campaigned later for Indian home-rule his concerns were never just nationalistic but included alleviating extreme poverty in India and reforming various traditional aspects of her society while trying to steer it away from some noxious (in his opinion) characteristics of modern Western culture — e.g. capitalist greed, which he associated, however, not with Britain in particular but with modern urban culture in general. As the anti-imperial movement

229. *KGA* and *MMA* are substantial anthologies of Gandhi's remarks on economic topics. Some books on Gandhian economics — in order of publication from 1960 (the year of Kumarappa's death) until early 2001 — have been *NPP*, *MDD*, *DAT*, *NRG*, *BGE*, *MIC*, *MBA*, *NKB*, *GSP* (Part II), *MET*, *NTP*, *SIE*, *DFG*, *RGS*, *SEN*, *DLE*, *GNI*, *PGE*, *TTA*, *NET*, *PGA*, *SGH*, *GEP*, *BWL*, *PED*, *BES* and *CGG*.

230. He often made remarks in the following vein:

"Emerson has said that a foolish consistency is the hobgoblin of little minds. We would be utterly lost if we tried to live and show that there was no contradiction in our lives.... In trying to preserve such forced harmony, we would have to resort to untruth. The best way is to follow the truth as one sees it at the moment." (*GCW* XXXVII, 264)

"At the time of writing I never think of what I have said before. My aim is not to be consistent with my previous statements on a given question, but to be consistent with truth as it may present itself to me at a given moment." (*GCW* LXX, 203)

Some well qualified Indian observers have held that as Gandhi was not a systematic thinker, it was Kumarappa who actually "systematized" (*VRE*, 225) or "formulated" (*GPI*, 58) Gandhian economics.

of which he took over the leadership in 1919 gained ever more momentum and gradually weakened British hegemony in India,²³¹ he tended to focus more on her economic problems (even though prison terms, urgent political developments etc. often intervened). It is true that in the Salt March (1930) he used an economic issue to make a political point. But then the AIVIA became one of his top projects in the mid-1930s, and this was not about British rule but addressed instead such broad economic concerns that, for instance, American influence could, once India won her political independence, be perceived as more subversive than British. Kumarappa was Gandhi's main deputy in this radically new and vast socio-economic project, just as Nehru was in the political project of arranging for an indigenous national government to be established in New Delhi.

(b) Underlying Gandhi's ideas about economics were some of his Hindu beliefs: that the individual soul is immortal because when the body dies the soul is reincarnated in a new-born human or animal; that the world has an inherent moral order because the cosmos is coherent and fairness makes it so; that one cannot achieve good by evil means, because bad *karma* due to the evil will always somehow take its full toll;²³² and that since humans in general are spiritually higher than animals (Gandhi had an idiosyncratic though still very considerate Hindu attitude toward cows), all currently human souls are morally sensible.²³³ Such beliefs not only imbued his non-violent methods of striving against injustice (his equivalent to *jihad* in the Koranic sense — he was quite familiar with that concept as well), but also disposed him to reject an "economic-man"-type image of ruthlessly selfish individuals:

"Religion is not different sets of opinions ... [but] the quality of one's soul.... [It] exists among humans in visible or invisible form. Through religion we are able to know our duties as human beings ... [and] our true relationship with other living things." {*HJI*, 35}

231. According to a British historian of the decline of British hegemony in India, "Despite the trappings of imperial authority the penultimate decade of the British *raj* [the 1930s] wrought a weakening and withdrawal of resources. The weakening occurred at the level of Britain's basic interests in India, her ability to protect them, and of the legitimacy recognized in the *raj* by the mass of its subjects." {*BMI*, 315}

232. Military theorists sometimes speak of "collateral" effects.

233. Gandhi liked the traditional Hindu metaphor of the morally indifferent person's soul as a sad droplet of water isolated from the deep and joyous ocean.

(On Kant's tomb in Königsberg Cathedral is inscribed his statement that "The starry heavens above and the moral law within fill the mind with an ever new and increasing admiration and awe, the more often and the more steadily we reflect.")

"With a mass of evidence ... [Darwin] has shown how man came into being ... [and] that moral strength is even superior [in promoting the survival of the species] to physical and intellectual strength.... A peaceful disposition is one aspect.... Freedom from bad habits forms another.... It is the duty of man to bear this truth in mind [i.e. that moral strength promotes the survival of the human species] and to practice altruism, which is the highest form of morality." {*GCW* VI, 317-18}

Gandhi did not regard money²³⁴ and competition as beneficial to society, and therefore he felt for many years that a reformed caste system (for which he used the term "varna system") would be better than letting individuals choose the kind of work by which to earn their living:

"The beauty of the caste system is that it does not base itself upon distinctions of wealth-possessions. Money, as history has proved, is the greatest disruptive force in the world."²³⁵ {*GCW* XIX, 174}

"The object of the varna system is to prevent competition and class struggle and class war.²³⁶ ...I believe in the varna system.... [It] means the determination of a man's occupation before he is born.... In the varna system no man has any liberty to choose his occupation." {*AWS* IX, 277}

Kumarappa never upheld the caste system²³⁷ or the doctrine of inherited vocation. He did not wish to eliminate competition, but only its "unhealthy" forms.²³⁸ And he held that "money-exchange has made great contributions towards consolidating the human family" {*KBA*, the first sentence}.

Owing to the influence of people like Kumarappa and Ambedkar,²³⁹ Gan-

234. Many 19th- and 20th-century Indians had reason to feel this way; see note 52.

235. An American asked Gandhi: "If money is to be given to India, in what ways can it be wisely given without causing harm?" Gandhi replied: "When ... given, it can only cause harm. It has got to be earned when it is required.... The American ... money which has been voted for missionary societies has done more harm than good.... When the American says, 'I will serve you through money,' I dread him.... Send us [instead] your engineers ... to give us the benefit of their scientific knowledge." {*GCW* LXIV, 39-40}

236. An analogous idea in the Western tradition was expressed as follows by Shakespeare (*STC*, I, iii; influenced apparently {*TSP*} by the first paragraph of a "Sermon of Obedience" in *CSH*): "Take but degree away, untune that string, / And hark what discord follows. Each thing meets / In mere oppugnancy [i.e. strife]."

237. The passage cited on pp. 30-31 is the closest he came to doing so. 238. See p. 41.

239. Ambedkar (1891-1956) was born in a caste of "Untouchables" and became in the 1930s a political leader of the Untouchables and one of Gandhi's sharpest critics. Later he served (it was Gandhi's idea) as chairman of the committee that drafted the Constitution of the Republic of India. He and Kumarappa studied with the same professor in New York (see p. 15). Gora (see note 131) also helped bring Gandhi around

dhi's views on caste gradually evolved (according to *LGC*) until, in his last years, his socio-economic ideal was described by his secretary as follows:

"...a casteless and classless society, in which ... all service has equal status and carries equal wages; those who have more use their advantage not for themselves but as a trust to serve others who have less; [and] the motivating factor in the choice of vocation is not personal advancement but self-expression and self-realization through the service of society.

"Since all service here ranks the same and carries equal wages, hereditary skills are conserved and developed from generation to generation instead of being sacrificed to the lure of personal gain. The principle of community service replaces unrestricted, soulless competition.... It is a ... world of cottage crafts and intensive, small-scale farming coöperatives, a world in which there is no room for [religious] communalism or [for] caste, in which the economic frontiers are drawn closer but the bounds of individual freedom are enlarged to their maximum limit; everybody is responsible for his immediate environment and all are responsible for society. Rights and duties are regulated by the principle of interdependence and reciprocity. There is no conflict between the part and the whole, [and] no danger of nationalism becoming narrow, selfish or aggressive." (*PLP*, I, 539-40 or I/ii, 181)

Ruskin and Gandhi

Gandhi's interest in economics can be dated from the night in 1904 when he read Ruskin's *Unto This Last* and, as he later recalled, "arose with the dawn, ready to reduce these principles to practice." He had known already that "the good of the individual is contained in the good of all," but it had not yet occurred to him — in those days he was a lawyer and civil-rights activist in South Africa — that "a life of labor, i.e. the life of a tiller of the soil and the handicraftsman, is the life worth living" (*GA*, IV, xvii). In 1908 he wrote a booklet, entitled "*Sarvodaya*" (meaning "service to all") summarizing *Unto This Last*.²⁴⁰ Here is an abstract of *Sarvodaya*, with the rhetoric cooled down and with marginal comments:

in 1946 to the view that the caste system had to be done away with, "root and branch." Gora was Brahmin-born (i.e. very high-caste); in January 1946 Gandhi told the Untouchable-born (very low-caste) prospective son-in-law whom Gora had, with his eldest daughter's consent, chosen for her: "You should become like Ambedkar. You should work for the removal of untouchability and of caste. Untouchability must go at any cost." (*LGC*, 9)

240. Gandhi described Ruskin (e.g. in *GA*, II, i) as one of three moderns who had deeply influenced him. The others were Tolstoy and Rajchandra Mehta (a Jain seer who in the first half of the 1890s guided him on some salient religious issues). Tolstoy was influenced by *Unto this Last*. (So were most of the 29 members of the British House of Commons who in 1906 founded the Labor Party; see *LAV*, 303 and *RGR*, 220.)

One of mankind's worst delusions has been the economist's idea that a [socially] advantageous code of action can be determined without considering the role of social affections. Like most delusions it is plausible. The economist, regarding the affections as incidental, but avarice and the desire for progress as constant, says, "Let us set aside the inconstants and examine by which laws of labor, purchase and sale the greatest amount of wealth can be accumulated; then each individual can introduce as much of the incidental elements as he chooses." It seems logical; if a physical body's motion is determined by constant and inconstant forces, the way to analyse it is to reckon first the constant ones and then the others. However, the affections are not incidental, but essential to human nature and society. A science of gymnastics which dwelt upon the advantages—assuming that gymnasts had no skeletons—of flattening them into cakes or stretching them into cables, would be invalid. Economists suppose that man has no *soul* to be taken into account, and develop their laws accordingly.

When workers strike, the economist may try (usually in vain) to show that the masters' interests are not contrary those of the men. However, it does not always follow that people have to be antagonistic just because their interests differ. If a mother and her children are starving, their interests are not the same, yet it does not follow that they will fight for the last crust of bread and that the mother, being strongest, will get it and eat it. Even if we consider people as susceptible only to such moral influences as affect rats or swine, still it is notable that the master's and laborer's interests are neither all alike nor all opposed. It is in the interest of both that the work should be rightly done and a just price obtained for it. In distributing income the gain of the one may or may not be the loss of the other. It is not in the master's interest to pay wages so low as to leave the men sickly and depressed, nor in the workman's interest to be paid high wages if the smallness of the master's profit hinders him from conducting the business securely. So it is mistaken to try to induce rules of economic action from conflicting interests. Human actions were intended by the Maker of men to be guided instead by justice. No one can know what will be the ultimate result of any proposed line of conduct; but everyone may know, and most of us do know, what is a just and an unjust act, and all of us may know that the consequences of justice will be ultimately the best possible, both to others and ourselves, though we can say neither what is best nor how it is likely to come about.

I use the term "justice" in a (perhaps unusual) sense which includes such affection as one person owes to another. Consider for example domestic servants. Suppose that a master, trying to get as much work out of them as he can for the wages he pays, (a) never allows them to be idle and (b) feeds and lodges them as poorly as they will endure. This does not violate what is commonly called justice, if each servant who can get a better job is free to do so; and the economist will say

Ruskin attacks the primitive psychology (see p. 157) of orthodox economic thought.

He counters 'physics envy' with a metaphor derived from medical science.

Now he will describe his alternative psychology. The supposed industrial strife is among men; the counter-example is a mother.

The concept of justice (in Hindu terms, dharma: see note 241) is approached.

—and will now become the main theme.

The example refers to traditional servants who are members

that it is the way to get the greatest average rate of work from the servant and therefore the greatest benefit to the community (and, through the community, to the servant himself). Well, it would be so if the servant were a steam-engine; but really his motive force is in his soul and the largest rate of work will be gained when it is brought to its greatest strength by its proper fuel, the affections. It is true that a sensible and energetic master can by exerting pressure get his servants to do more work, and that the servants of an indolent and weak master will generally do less. However, for any given quantity of energy and sense in the master and servant, greater results will be obtained through mutual affection than mutual antagonism. This is true even though indulgence may be abused and kindness met with ingratitude; for the servant who when gently treated is ungrateful will be revengeful if treated harshly, and he who is dishonest to a liberal master will be injurious to an unjust one.

Here I am considering, not the value of affections for their own sake, but only how their motive power vitiates the economist's reckoning. They are most powerful when the selfish motives (which he regards as the only basic ones) are not dominant. The master who treats his servants well only because he wishes to exploit their gratitude will get, as he deserves, no gratitude or value in return; but if he treats them kindly for their own sake, they will devote themselves to his interests.

Another example is the relation between the commander of a regiment and his men: For which kind of commander will they risk their lives in battle? A team of robbers may also be animated by perfect affection—but usually not a group associated for the purpose of legal production if the wages vary with the demand for labor and if there is an ever-present risk of being thrown out of work because of market vicissitudes; under such conditions, *disaffections* rather than affections come into play. So let us ask to what extent (a) wages may be prevented from varying with the demand for labor, and (b) workers may be engaged and maintained on steady wages so as to give them an *esprit de corps* (like that of the soldiers in a crack regiment) or a permanent interest in the establishments with which they are connected (like that of the servants in an old family).

(a) The economist says that wages must vary with demand for labor, but in reality the best labor has always been paid by an invariable standard. "What!", you may say, "Pay good and bad alike?" Yes; you pay alike the good and bad preachers (workmen on your soul) and the good and bad physicians (workmen on your body), so why not the workmen on your house? "But I choose my physician!" Then choose your bricklayer; it is the proper reward of the good one to be chosen, and it is better for the bad one to be unemployed than to let him offer his work at half-price and thereby either take the place of the good or else force the good by his competition to work for an inadequate sum.

of the master's household (whereby there could well be the kind of affection that might occur between members of different castes with mutual obligations).

(Quasi-military courage under duress was vital to Gandhi's civil disobedience.)

(Now the parable from which the title of Ruskin's book was derived (see note 147) begins to become relevant.)

(b) To provide regular employment for his workers is good for the master in the long run even though he cannot then make large profits or take big risks. People will scorn him if he complies with their notion of his willingness to cheat for the sake of his private gain.

We have to give up this notion and see the merchant instead as engaged in one of the five great intellectual professions that exist in every civilized society: the soldier's, to defend it; the pastor's, to teach it; the physician's, to keep it in health; the lawyer's, to enforce justice in it; and the merchant's, to provide for it. Production involves many hands, so the merchant becomes a governor of men more directly than a military officer or pastor; he is largely responsible for the kind of life they lead as well as for the quality and just price of the merchandise. And, just as a ship's captain is bound to be the last man to leave it in case of wreck and to share his last crust with the sailors, so the manufacturer, in a commercial crisis, is bound to take the suffering with his men. This may sound strange, but really the only strange thing is that it does; for other doctrines are inconsistent with a progressive state of national life.

The economist will reply, "The development of social affections may help society, but my science is simply that of the investor getting rich, and as such has proven effective. Your tricks of logic cannot undo the fact that capitalists become rich by following my laws."

Such "richness" is a relative thing, however. The force of the dollar in your pocket depends on its lack in your neighbor's; it would be useless to you unless he wanted it; and here we can see the difference between getting rich and true political economy. The latter consists of the production, preservation and fitting distribution of useful or pleasurable things. The farmer cutting his hay at the right time, the builder laying good bricks in well-tempered mortar, the housewife taking care of her furniture in the parlor and avoiding waste in the kitchen—they all add to the material well-being of the nation. In contrast, getting rich is a matter of accumulating legal claim upon, or power over, the labor of others. (Indeed, a large estate of land, however fruitful, is of little commercial use to its owner unless he can command labor to work it.) Such power increases with the poverty of those over whom it is exercised, and decreases with the number of people who are as rich as ourselves. To become rich thus means to establish inequality in our own favor—and it is a mistake to assume that such inequalities necessarily benefit a nation economically. The benefit depends on the methods by which the inequalities are established and the purposes to which they are applied.

The circulation of wealth in a nation is like that of blood in our bodies. A quickness of the current can be due to cheerful emotion or wholesome exercise, or else to shame or fever. There is a flush of the body which is full of warmth and life, and yet another passing into putrefaction. And just as a diseased local rush of blood involves de-

Pastors = Brahmins. Soldiers & lawyers = the knightly varna. Merchants = Gandhi's varna. This is akin to Gandhian "trusteeship."

Here is "economic man" without the "invisible hand."

See note 150 apropos this distinction between monetary and economic facts.

See apropos the first sentence of the citation on p. 62 from Tolstoy.

Again an analogy (albeit evoking the now-antiquated

pression of the general health of the system, so any morbid local action of riches will ultimately involve weakening the body politic.

Imagine, for instance, that two men, A and B, living on an island previously uninhabited by humans, by working steadily together in amity and good health cultivate some land, lay up supplies, etc. Their political economy would consist in the careful preservation and just use of these possessions. Now suppose they divide the land and each lives on his share. If A should then occasionally fall ill and be unable to work at sowing- or harvest-time, he will naturally ask B to sow or reap for him; and B may with perfect justice require that the labor be repaid later on. Now their total wealth will probably become less—and not just because of the initial loss of A's labor, but also when and if B becomes idle as he lets A pay off the labor-debt. That is, not only A's poor health but also B's becoming "rich," i.e. getting a claim on A's labor, will tend to reduce the sum of their material possessions.

Imagine now a republic with three men (A,B,C); imagine that A and B each have lands yielding some distinct kinds of needed produce, and that C instead of farming, superintends the transferences of commodities, on condition of getting a share of every parcel. By doing it well and justly he can help make the republic more prosperous; but if A and B can trade only through him and if he exploits them ruthlessly, he can gradually reduce and eventually take over their estates in a year of scarcity if they each need for their survival something he brings from the other's estate. By following the economist's principles he becomes rich and thereby reduces the republic to poverty.

Justice is essential to prosperity; so at any moment a given accumulation of commercial wealth may be the hallmark either of a healthy economy (with faithful work, energy and ingeniousness) or of an unhealthy one (with luxury, chicanery and tyranny). Thus the economist's prescription always to buy as cheap and sell as dear as possible is dangerous. We cannot know all the dangers, but only whether our dealing is just and faithful and thereby contributes to a healthy state of affairs.

While money amounts to power over other people, *moral* power is just as real, and the nobler it is, the greater will be the ensuing wealth, since one person's moral power does not depend upon another's lack of it.

An ancient Jewish merchant and sage wrote:

"Rob not the poor because he is poor; neither oppress the afflicted in the place of business. For God shall spoil the soul of him who hurts them.

and

"The rich and poor have met. God is their maker and their light."

Indeed there has to be economic inequality, with wealth flowing here and there like water; yet the way it flows—whether gently or harshly, whether acting as irrigation or as a destructive flood—can be governed so that we live by a science of human justice rather than by the econo-

*practice of
of blood-
letting)
between the
health of an
individual
and of a
larger
"organism."*

*Gandhi
wielded
moral power
against Brit-
power due
to money.*

*This is from
the Bible
(Proverbs,
xxii/2, xxix/13).*

*This is
contrary
to Marxism;
and Gandhi*

mist's science of reducing people to the level of beasts. Fair payment lies between two extremes. (1) Two people competing for the same employment underbid each other and the one who gets it is underpaid; (2) only one person is available to do some work which two others want to have done; the would-be employers overbid each other and the worker is overpaid. A man paid fairly will in turn add strength to the stream of justice by acting fairly to his subordinates; a society permeated by such justice will be happy and prosper.

There is no wealth but life. That country is truly richest which nourishes the greatest number of noble and happy human beings; and that man is richest who, having perfected the functions of his own life, has also the widest helpful influence, both personal and by means of his possessions, over the lives of others.

The economist's precepts make the poor poorer without making the rich happier. But because some men believe that "the more factories, the merrier," others leave their village farms and live diminished lives in the midst of urban noise, darkness and poisonous fumes. To establish big factories with a view to getting rich may lead the entrepreneur into sin, as modern capitalism is responsible for widespread and unjust wars due to covetousness. While cultivators work in innocent contentment, money in the hands of bad men helps to produce weapons of destruction which wreak havoc among everyone.

Ruskin's book has a lesson for Indians. Modern Western civilization, a mere baby (100 or only 50 years old) as civilizations go, has reduced Europe to a sorry plight, with the nations poised to attack one another and pouncing on new territories like crows upon a piece of meat. I am inclined to think that this is due to their mass-production factories.

Poverty

Gandhi distinguished between a more-or-less voluntary, moderate degree of poverty, and a degrading, extreme degree: grinding poverty. In regard to the first, he said that "poverty adopted as a matter of *dharma*²⁴¹ is true wealth" (GCW LXXV, 358); he praised people who "deliberately embrace poverty as their lot"; he preferred simple weddings (with the guests bringing the food) to the traditionally obligatory lavish type;²⁴² he said that among his fellow Indians in South Africa he had "observed almost invariably that

*has been
criticized
accordingly
by Marxists.*

*Happy, noble people
are considered human
capital.*

*These last
two paragraphs
are due to
Gandhi, but
the references to factories
are from
a later edition,
not the original
1908 version
{GCW, VIII,
372-75}.*

241. *Dharma* is an ancient Sanskrit word related etymologically to a verb meaning "to hold [things] together." It can sometimes be translated as "(ritual or moral) duty," sometimes as "(constitutive) justice," sometimes as "religion," etc.

242. Interview with Gandhi's daughter-in-law Nirmala, January 1996.

the greater the possession of riches, the greater was their moral turpitude" (GCW XIII, 312-314), and he said that in India:

"There is a particular type of man who delights in having as few needs as possible. He carries with him a little flour and a pinch of salt and chillies tied in his napkin; he has a [small pail] and a string to draw water from the well. He needs nothing else. He walks on foot, covering ten or twelve miles a day. He makes the dough in his napkin, collects a few twigs to make a fire and bakes the dough on the embers.... I have tasted it and found it most delicious. The relish does not lie in the food but in the appetite that honest toil and the contentment of the mind give. Such a man has God as his companion and friend, and feels richer than any king or emperor." (HA 1946, 232)

Even though he spoke often of "equality," he admitted:

"My ideal is equal distribution but as far as I can see, it is not to be realized. I therefore work for equitable distribution." (GCW, XXXIII, 167)

He saw in Kumarappa a man who gave up his own wealth in order to serve the poor. While in England in 1931 for political negotiations, Gandhi had occasion to address a meeting of Anglo-Indians, and he told them:

"Put your talents in the service of the country instead of converting them into pounds, shillings and pence.... Do what Kumarappa ... is doing.... Come to India. I will give you enough work and also your hire — four annas per day, which is surely much more than millions in India get."²⁴³ (GCW XLVIII, 183)

But as for the other kind of poverty — the extreme kind — when H. S. Jevons suggested to Gandhi in 1918 that the colonial salt-tax ought to be increased, Gandhi replied:

"Dear Prof. Jevons, I have gone through your note. I like it in the main ... [but] I do not agree with your financial side. The comparison between England and India is hopelessly misleading. England can afford, India is poverty-stricken. A few have enriched themselves during the war. But the masses? I have come in the closest touch with them in Kaira [Kheda] and Champaran.²⁴⁴ They have nothing. In Kaira, the exorbitant demands of the Government have impoverished a people who were once rich and powerful. In Champaran, the Planters have sucked the life-blood out of the people. You talk of a rise in the salt tax and send a shudder through my body. If you knew what is happening to the people owing to the tax, you would say, 'Whatever else is done, the tax must go today.'²⁴⁵ (GCW XV, 15)

243. An anna is 1/16 rupee. He also said (GCW XLVIII, 259): "I have seen them [Anglo-Indians] weep before me.... But if they would come [back to India] and claim the suffrage of our people, they are quite welcome.... Joseph Kumarappa can turn Gujarat [a province of India where Kumarappa had worked] round his fingers by dint of service."

244. See AG, 164-65 and 171-72.

245. The letter concludes: "Enslavement of the nation is thorough. The Englishmen have not deliberately meant it but they could not have done more if they had. I only cling

When pleading guilty in the Great Trial (1922) to the criminal charge of "preaching disaffection," he said:

"The British connection [has] made India more helpless than she ever was before, politically and economically.... She has become so poor that she has little power of resisting famines.... Little do they [the town-dwellers] realize that the government established by law in British India is carried on for this exploitation of the [rural] masses.²⁴⁶ No sophistry, no jugglery in figures can explain away the evidence [which] the skeletons in many villages present to the naked eye." (GCW XXIII, 117)

This remained a salient theme down to his last days, when he told his followers:

"Whenever you are in doubt, or when the self becomes too much with you, apply the following test. Recall the face of the poorest and weakest man whom you may have seen, and ask yourself if the step you contemplate is going to be of any use to *him*.... Will he gain anything by it? Will it restore [to] him ... control over his own life and destiny? In other words, will it lead to *swaraj* [self-rule] for the hungry and spiritually starving millions? Then you will find your doubts and ... self melting away." (PLP, II, 65)

Kumarappa in his last seven years resided in a one-room house, the interior decoration of which consisted of a picture (shown here) of a poor man. When asked who it was, he would say, "My master's master. My master is Mahatma Gandhi, and Gandhi's master is this villager." (GM XIV, 324)



Trusteeship

Gandhi used the terms "trust," "trustee" and "trusteeship" for a corollary, applicable to the rich, of his concept of voluntary moderate poverty:

to England because I believe her to be sound at heart and because I believe that India can deliver her mission to the world better through England. If I had not this faith, I so thoroughly detest her act of disarming India, her haughty and exclusive military policy and her sacrifice of India's riches and art on the altar of commercial greed, that I should declare myself a rebel.

"I did not want to give you a long letter, but my pen would not be checked."

Twelve years later Gandhi led a 250-mile march to the sea, picked up a handful of natural salt from the shore and thereby called upon Indians to "produce" salt without paying the tax. Within six months nearly 100,000 of them were imprisoned for doing so, and the next year Gandhi went to England for political negotiations. He and Jevons had remained occasionally (and cordially) in touch (GCW XXX, 27); Jevons was now in London, and during Gandhi's visit they undertook to meet (GCW XLVIII, 85).

246. In those days ca. 80% of India's people; still today some 70%. (The rate of migration to cities in the 20th-century was more moderate in India than in China.)

"Earn your crores [i.e. heaps of money] by all means. But understand that your wealth is not yours; it belongs to the people. Take what you require for your legitimate needs, and use the remainder for society.

"I see coming the day of the rule of the poor, whether that rule be through force of arms or of non-violence. Let it be remembered that the power acquired by physical force is transitory ... but the power of the spirit is permanent."²⁴⁷ {GCW LXXV, 259}

This concept of trusteeship was part of his answer to Marxism,²⁴⁸ and he regarded it as the only theory of property that is "compatible with non-violence" {GCW LXXI, 71}.

His first recorded use of such a term with such a meaning was in a letter of 1925 thanking a very rich friend of his, G. D. Birla, for honoring his request to donate a capital sum to help found a Moslem university, and offering some advice (solicited by Birla) as to what to do about a family quarrel over property:

"Property is bound to lead to quarrels, even murder. There is only one way out of your dilemma: to give up property altogether.... So long as we are not ready to renounce it completely, we should, as its trustees, use it for the good of others."²⁴⁹

His last discussion of the topic was in 1948. An American journalist asked him if he knew of any industrialist who lived up to his ideal of a "trustee" discharging his obligations faithfully and in the best interest of his wards;

247. This is far more than Aristotle's concession to such a spirit (in conjunction with his criticism {AP, II, v} of Socrates' ideal of communal property): "It is clearly better that property should be private, but the use of it common; and the special business of the legislator is to create in men this benevolent disposition."

248. In 1935 Nehru told Romain Rolland that Gandhi was reading Marx and Engels {RGC, 330}. Nehru was something of a socialist, and he and Gandhi would argue in the following vein (I have reduced this from NSW XV, 649): Nehru: "No man is really unemployed in a socialistic order. Take [Soviet] Russia. Every man [there] is a producer—he is part and parcel of the nation's wealth. You must see that in theory a certain economic structure will give you ideal conditions. We [in India] proceed towards it non-violently. Your approach as far as conversion is concerned is right, but you can't make a convert give up his vested interests. So I hate the idea of trusteeship on principle.... Behind your approach is a pressure which reduces conflict to a minimum; but the idea of trusteeship itself is illogical." Gandhi: "Trustees are allowed to have a commission—a laborer is worthy of his hire." Nehru: "They are their own employees? The idea is incorrect." Gandhi: "It's an approach. If factory-owners treat the laborers as part-proprietors, my ideal is fulfilled."

SFD, 132 is an insightful account of Nehru's "socialism" as prime minister.

249. GCW XXVI, 363-64. The letter was in Hindi. Birla published later two other, differently nuanced translations {BSM, 8-9; BBU, I, 23}.

Gandhi said, "No, though some are striving in that direction.... Birla, for instance. I hope he is not deceiving me...."²⁵⁰

The concept had-ripened over the years:

[1928:] "You [cotton-mill owners] have not yet done your part.... In some cases the laborers have not been provided with even the primary amenities.... The relation between mill-agents and mill-hands ought to be ... as between blood brothers.... You should hold all your riches as a trust to be used solely in the interests of those who sweat for you.... Make your laborers co-partners of your wealth.... I do not mean to suggest that unless you legally bind yourselves to do that, there should be a labor insurrection. The only sanction that I can think of in this connection is that of mutual love and regard.... If only you make it a rule to respect these mutual obligations of love, there would be an end to all labor disputes [and] the workers would no longer feel the need for organizing themselves into unions."²⁵¹ {GCW XXXVI, 288-29}

[1931:] "No one compels them [the rich] to be 'trustees.' I invite the person who has a hundred rupees to keep fifty rupees and give the other fifty to the workers; but in the case of a person who has ten million rupees I shall ask him to retain, say, one percent." {GCW XLVIII, 243}

[1934:] "The ownership of your lands belongs as much to the [peasants] as to you and you may not squander your gains in luxurious or extravagant living, but must use them for the well-being of the [peasants].... [They] have themselves no greater ambition than to live in peace and freedom and they will never grudge you your possession of property provided you use it for them." {GCW LVIII, 247-49}

By the mid-1930s, the Russian experience was drawing Gandhi's attention more than before:

[1934:] [Q.] "If you say that private possession is incompatible with non-violence, why do you put up with it?" [A.] That is a concession one has to make to those who earn money but who would not voluntarily use their earnings for the benefit of mankind." [Q.] "Why then not have state-ownership in place of private property?..." [A.] "It is better than private ownership. But that too is objectionable on the ground of violence." {GCW LIX, 318}

[1941:] "I adhere to my doctrine of trusteeship in spite of the ridicule that has been poured on it [by Marxists in India]. It is true that it is difficult to reach.... [Yet] a non-violent system of government is clearly an impossibility so long as the wide gulf be-

250. GCW XC, 521-22. Gandhi was at that time a guest in Birla's house in New Delhi, and died there the next day. A few days before, Gandhi's secretary had told an American journalist, in regard to Birla and the principle that "wealth must not exist for selfish purposes but for the profit of society as a whole": "Gandhiji never tries a man beyond his capacity. But just up to his capacity." {BHF, 62}

251. (For an analogous statement to landlords, see GCW XLII, 239-40.) The reference to love and regard calls to mind Ruskin's argument (see above) about social affections.

tween the rich and the hungry millions persists. The contrast between the palaces of the New Delhi and the miserable hovels of the poor laboring class nearby cannot last one day in free India in which the poor will enjoy the same power as the richest in the land. A violent and bloody revolution is a certainty one day unless there is a voluntary abdication of riches and the power that riches give and sharing them for the common good." {GCW LXXV, 158}

and now he would sometimes call attention to a positive aspect of free enterprise:

[1936:] "Trusteeship, as I conceive it,... is an attempt to secure the best use of property for the people by competent hands." {GCW LXIV, 385}

[1945:] "All that one can legitimately expect of the wealthy class is to hold their riches in trust and use them for the service of society. To expect more would be to kill the goose that laid the golden eggs." {GCW LXXIX, 367}

After the war he gave some thought to the possibility of institutionalizing trusteeship in the Republic of India:

[1947:] "Choice [of the successor to a trustee] should be given to the original owner who became the first trustee, but the choice must be finalized by the State."²⁵²

But meanwhile:

[1940:] "If ... in spite of the utmost effort, the rich do not become guardians of the poor in the true sense of the term and the latter are more and more crushed and die of hunger, what is to be done? In trying to find out the solution of this riddle I have lighted upon non-violent non-coöperation and civil disobedience as the right and infallible means. The rich cannot accumulate wealth without the coöperation of the poor in society. If this knowledge were to penetrate to and spread amongst the poor, they would become strong." {GCW LXXII, 401}

[1942:] "[In free India] the villagers would take the land. We would not have to tell them to take it. They would take it." [Q.] "Would the landlords be compensated?" [A.] "No, that would be fiscally impossible, you see.... The village would become a self-governing unit." {GCW LXXXVI, 437}

Trusteeship is not a theme in Kumarappa's writing. At Doveton College the idea had been taught to him in order to justify the British hegemony in India; so, his anti-imperialism prompted him to see mainly that discredited aspect of the idea. Moreover, after becoming a Gandhian and moving out of Bombay, he apparently never again had any rich friends to whom he could have propounded it even if he wished to. In this regard he differed from Gandhi, who could make friends with anyone.

252. GCW LXXXVI, 423; for further analysis see *BEG*, iv and *MGG*, ix.

Bread labor

This idea was, like trusteeship, supposed to be realized voluntarily by more or less enlightened individuals in society at large. Within Gandhi's experimental communes, however, it was an explicit obligation. Each able-bodied member of the ashram had to do physical work for at least a couple of hours each day:²⁵³

"In institutions which I have founded ... he who does not do manual work ... is not entitled to eat his portion of food.... When a man shirks manual work, he stunts his moral growth.... Jesus ... said, 'Thou shalt earn thy bread by the sweat of thy brow,'²⁵⁴ and if this was literally followed, there would be very little illness on earth,²⁵⁵ and little of hideous surroundings." {GCW XLVIII, 415}

"I do not discount the value of intellectual labor, but no amount of it is any compensation for bodily labor which every one of us is born to give for the common good." {GW XXVIII, 339}

"For certain hours of the day there is nothing to be done [at the ashram] but work ... drawing water, splitting firewood, cleaning and filling lamps with oil, [performing] sanitary service, sweeping the roads and houses, washing one's clothes, cooking ... agriculture, dairying, weaving, carpentry, tanning and the like....

"Where body-labor is performed for mere wages, it is possible that the laborer becomes dull and listless. No one tells him how and why things are done.... But ...in the ashram ... everything including sanitary service must be done intelligently, enthusiastically and for the love of God. Thus there is scope for intellectual development.... Everyone in the ashram is a laborer; none is a wage-slave."²⁵⁶ {GCW L, 214-16}

And, by extension:

"If the refugees [in refugee-camps] want to ... convert suffering into happiness..., they must not shirk work.... Even if a millionaire eats and does not [do physical] work, he is a burden on the earth. Of course one can understand if you are a cripple, or if you are blind or too old. But ... let those who are strong of body clean lavatories in the camp, let them spin [cotton], let them do any other work that comes to hand." {GCW XC, 525}

253. I got this estimate ("a couple of hours") in 1994 from Lavanam Gora, who lived in Gandhi's commune at Sevagram in the mid-1940s.

254. This attributes to Jesus a statement which the Bible attributes instead {GEN, iii/19} to God the maker of heaven and earth {GEN, ii/4}. According to the Bible, having to win one's bread by the sweat of one's brow is part of God's punishment of man for the sins of (a) listening to his wife and (b) eating fruit from the (forbidden) tree of knowledge {GEN, iii/17}. Gandhi did not believe that.

255. See apropos *BBF*. Gandhi himself was, he admitted, a medical quack. His death at the age of 78 was due to three bullets fired into his chest at point-blank range.

256. This paragraph is, in effect, about a kind of alienation that is included in the meaning which Marx gave the term (see p. 70).

"If I had the power, I would stop every *sadavrata* [charity] where free meals are given. It has degraded the nation and it has encouraged laziness, idleness, hypocrisy and even crime." {GCW XXVIII, 58}

(It may be worth mention here that Gandhi did not consider humans to be endowed by a Creator with inalienable rights. Instead, he held that rights are earned in society by the performance of corresponding duties.)

During the last quarter-century of Gandhi's life his daily spinning ensured his faithfulness to the precept of bread labor. Kumarappa did a lot of physical work, but not necessarily every day.²⁵⁷

Factories

Gandhi's dislike of mass-production factories is evident in the last two paragraphs of my abstract of *Sarvodaya*;²⁵⁸ and an expert Indian historian has remarked, in regard to Gandhi's *Hind Swaraj* (1909):²⁵⁹

"The basic point made in this pamphlet is that the real enemy was not British political domination, but the whole of modern industrial civilization.... The central passage reads: 'India's salvation consists in unlearning what she has learnt during the past 50 years or so. The railways, telegraphs, hospitals, lawyers, doctors and such like all have to go, and the so-called upper class have to learn to live consciously and religiously and deliberately the simple life of a peasant.'

"The Gandhian social utopia as outlined in *Hind Swaraj* is undoubtedly unrealistic ... and it never had much appeal for sophisticated urban groups which by the 1930s and '40s would turn increasingly to either capitalist or socialist solutions based on industrialization. But it did represent a response to the deeply alienating effects of 'modernization' particularly under colonial conditions.²⁶⁰

257. Herbert Fischer (a colleague of Kumarappa's in 1937-38: see GCW LXV, 2 and 355), personal communication, June 2000. Yet according to Kumarappa's recollection in the mid-1950s of the AIVIA's early days, "One of our rules ... was that everyone should take part in all our daily activities. This included washing heavy kitchen utensils." (See VKQ, 106—and, on the same page, his account of how, as he and Gandhi were doing so together one day, Gandhi's wife "appeared on the scene ... [and] could not tolerate the sight of the great Mahatma with his hands up to the elbow in dirt." She and Kumarappa finished the work.)

258. See p. 97, and TCC on late-19th- and early-20th-century Indian factory hours. In 18th- and early 19th-century India the word "factory" (without the qualification "mass-production") would mean a British-East-India-Company fortified trading station.

259. The English-language version of this title is "Indian Home-Rule"; but *swaraj* really means "self-rule," which for Gandhi meant self-discipline (see for instance note 196) as much as it did independence from British imperialism.

260. SMI, 180-81. The author goes on to say: "Gandhi [subsequently] concretized his message through programs of *khadi* [homespun cotton], village reconstruction, and

But according to an eminent British historian:

"Gandhi ... was not in fact the fanatical opponent of all machinery and industry he is often popularly supposed to be. In mid-1935 he explained that he was hostile to machinery only if it enriched the few at the expense of the many, or displaced useful labor, and he recognized that 'heavy machinery for work of public utility which cannot be undertaken by human labor has its inevitable place,' but in such cases it should [he said] be state-owned and used for the benefit of the people. He was not totally hostile even to large-scale production, but it could [he felt] only be tolerated for articles that villages could not easily produce."²⁶¹

That his views did change somewhat is evident in the following excerpt from a letter of 1931 to Stefan Zweig from Romain Rolland:²⁶²

"Gandhi — today's Gandhi — in no way condemns machinery or industrial techniques, insofar as they bring help and relief to humanity; his quarrel is merely with their murderous excesses and the morbid myth of economic overproduction. When you look at India, you find a very special situation. The Indian climate does not allow the peasants to work on the soil for more than four months in the year at most. Since English domination has undermined the village crafts which added to the insufficient profits they drew from the land, millions of men have been reduced to poverty and malnutrition. The most urgent problem is to bring back craftsmanship, of which the simplest form, accessible to all and bringing in sure returns, is the spinning wheel. This is just common sense, and it's absurd to think that Gandhi would dream of applying it in Europe. All he would do would be to encourage the workers of Europe to create independent trades for themselves outside the large industries, which would enable them to sustain

(somewhat later) Harijan welfare [i.e. the welfare of those born into "Untouchable" castes].... None of these really solved problems in the sense of changing social or economic relations, but, when tried out with sincerity and patience by devoted Gandhian constructive workers, they could improve to some limited extent the lot of the rural people." (For a similar but more aggressive British view, see SHI, 345-46.)

261. BGP, 300. The author goes on to say that "even so, he was out of tune with most Congressmen, who looked forward to a modern, industrialized economy on Western lines. Nehru in particular was deeply influenced by what he had seen of economic planning in Russia."

An American journalist in 1948 asked G. D. Birla (see pp. 100-01) "how he [Birla] felt about cottage industries. 'Even in your country ladies sit knitting,' he replied. It was not correct, the industrialist added, to say that Gandhi was opposed to large-scale industry. He was not in favor of it, but it was more accurate to say that 'he doesn't take any interest.' Then Mr. Birla made a statement that surprised me. 'His philosophy is that he doesn't believe in too high a standard of living.' When I looked into this later I found that Mr. Birla was quite right." {BHF, 67}

262. RGC, 459-60. Zweig's biography of Rolland (ZRR) describes him in a prefatory dedication as "one who for me and for many others has loomed as the most impressive moral phenomenon of our age."

with some chance of success their inevitable struggle against the bosses who try to exploit them."²⁶³

Yet even after this, Gandhi considered it a "movement of despair" to:

"...destroy the villages and dot India with a number of big cities where highly centralized industries will be carried out and everyone will [allegedly] have plenty and to spare" (*GCW* LXVIII, 362-63).

He said that in independent India:

"Heavy industries²⁶⁴ will need to be centralized and nationalized. But they will [i.e. should] occupy the least parts of the vast national activity which will [i.e. should] mainly be in the villages." (*GCP* 412)

Kumarappa took an equally dim view of the centralized production in India of consumer goods.²⁶⁴ He would, for instance, consider villages better served by bullock-carts than by cars and trucks.

Spinning

Handloom weaving (with factory-made thread) was taken up at Gandhi's ashram in India in 1916. Toward the end of 1917, he heard of some Muslims elsewhere in India who "still had dusty old [spinning] wheels in their lumber rooms" (*AG*, 179). He himself took up spinning cotton during a convalescence in 1918, and then began to advocate that every other Indian nationalist do it as well.²⁶⁵ It yields a basic economic requirement; the raw

263. Gandhi had just visited Rolland and, among other things, told him, "I do not consider the antagonism between-capital and labor to be inevitable.... I think it would be possible to establish a harmony between them. But if it were proved ... impossible in one factory or another, I should not hesitate to increase the power of [organized] labor to such an extent that the destruction of capital would result, or its complete transference into the hands of labor." (*RGC*, 217) (He said it could be done non-violently. See *CRG*, 226-28 for a brief account of how he led an industrial strike. *BMU* gives more detail and tells what became of the labor union that he thereby helped found.)

264. Note for readers with no training in economics: "heavy" industries produce things which consumers do not themselves purchase: for instance, heavy industries produce big dams, steel mills, the processed metals and plastics from which certain mass-produced things are made, and the mechanized assembly-lines on which they are mass-produced; whereas houses, cars and trucks, spinning wheels, paper, vegetables in the market etc. are "consumer goods." Gandhi's wish as to the relative amounts of Indian industrial output in the two categories was not fulfilled; see note 134.

265. He founded in 1925 the All-India Spinners' Association (see *AG*, 246); but by then, a Gandhian historian admits (*NGF* 121; *NMN* 192), "even some of his erstwhile ardent followers professed to be bored or baffled by his obsession with the spinning wheel."

materials as well as the equipment and techniques are native to India;²⁶⁶ and the resulting clothing is very comfortable in the climate in most of India. Because of Gandhi's advocacy, making and wearing khadi came to symbolize throughout India a determination not only to use domestic rather than British products, but also to resist imperialism by his methods and under his political discipline, and with a new and quite visible link between the educated rich and the illiterate poor. Spinning is nearly as handy to do as knitting, but sufficiently more difficult that to master it feels like an accomplishment. It is healthy exercise and can be done (once mastered) while conversing or meditating. I have seen a Gandhian — an academic — doing it for relaxation after a strenuous journey. Another one, very active in political causes in behalf of the poor, yet in his 80s and virtually blind, told me in 1998 that his daily spinning was a form of prayer sustaining his determination to remain active politically. Thus only some of Gandhi's reasons for making a fetish of it were economic.²⁶⁷

During a personal campaign in 1933-34 throughout India against untouchability, Gandhi observed that notwithstanding his having urged the unemployed to spin cotton, many of them were not taking it up:

"So I said to myself, '...If they will not interest themselves in khadi, let them take up some work which used to be done by their ancestors but which has of late died out. There were numerous things of daily use which they used to produce themselves not many years ago, but for which they now depend on the outer world ... [and] things of daily use to the town-dweller for which he depended on the villages but ... now imports from the cities.... Khadi will be the sun of the whole industrial system. All the other industries will receive warmth and sustenance from the khadi industry.'" (*GCW* LIX, 408-09 and 411)

266. Nearly 2500 years ago Herodotus wrote: "There are trees which grow wild there [in India], the fruit of which is a wool exceeding in beauty and goodness that of sheep. The natives make their clothes of this tree-wool." (*HH*, III, cvi)

267. Gandhi arranged for improvements in design. In the picture shown to the right, someone he taught how to spin is shown demonstrating (50 years later to me) a portable model.



He therefore founded the All-India Village Industries Association. But in due time Kumarappa would accuse him of still overemphasizing khadi *vis à vis* the other village industries (see *GCW* LXXI, 102). Gandhi's response was to describe the "implications of khadi" as follows:

"Khadi mentality means decentralization of the production and distribution of the necessities of life.... The formula so far evolved is: every village to produce all its necessities and a certain percentage in addition for the requirements of the cities." (*GCP*, 12)

He saw as follows the "macroeconomic" aspect of spinning:

"A hundred and fifty years ago, we manufactured all our cloth. Our women spun fine yarns in their own cottages, and supplemented the earnings of their husbands.... India requires nearly thirteen yards of cloth per head per year. She produces, I believe, less than half that amount. She exports several million bales [annually] of cloth to Japan and Lancaster and receives much of it back in manufactured calico,²⁶⁸ though she is capable of producing all the cloth and all the yarn necessary for supplying her wants by hand-weaving and hand-spinning.... The spinning wheel was presented to the nation for giving occupation to the millions who had, at least four months of the year, nothing to do." (*FGL*, 83-84)

Self-reliance

Gandhi often evoked the ideals of self-reliance and self-help in regard to the individual, the village, the working classes, and the nation; yet he sought not to overdo it:

"Let us not ... forget ... man's social nature.... If it is his privilege to be independent, it is equally his duty to be interdependent.... It will be possible to reconstruct our villages so that the villages collectively, not the villagers individually, will become self-contained, so far as their clothing requirements are concerned." (*GCW* XL, 241)

One might expect the greatest anti-imperialist — the one who led the biggest colony out of the biggest empire — to advocate national self-reliance. Gandhi used a Hindi term, *swadeshi*, which means "own nation" etymologically and had been used as early as 1905 to mean boycotting imported goods;²⁶⁹ but definition of it (*GCW* XIII, 219) was more interesting:

"that spirit in us which restricts us to the use and service of our immediate surroundings to the exclusion of the more remote."²⁷⁰

268. The term is etymologically derived from "Calcutta," where the British had presumed that calico had originated.

269. See *SHI*, 290-94 for a concise account of the political context of that earlier use.

270. Kumarappa and Gandhi both said that "goods manufactured by Indian mills were not genuine swadeshi" (*SNK*, 292-93). For Gandhi the concept implied also to "make use

In politics it still included international boycotting, however:

"Much of the deep poverty of the masses is due to the ruinous departure from swadeshi in the economic and industrial life. If not one article of commerce had been brought from outside India, she would be today a land flowing with milk and honey. But that was not to be. We were greedy and so was England....

"I think of swadeshi not as a boycott movement undertaken by way of revenge.²⁷¹ ... [Yet] India cannot live for ... any other country before she is able to live for herself; and she can live for herself only if she produces everything for her requirements within her own borders....

"I hate legislative interference in any department of life. At best it is the lesser evil. But I would ... welcome ... a stiff protective duty upon foreign goods.... We would be making for the goal even if we confined swadeshi to a given set of articles, allowing ourselves as a temporary measure to use other such things as might not be procurable in the country....

"My patriotism ... is exclusive in the sense that in all humility I confine my attention to the land of my birth, but is inclusive in the sense that my service is not of a competitive or antagonistic nature. *Sic utere tuo et alienum non laedas*²⁷² is not merely a legal maxim, but is a grand doctrine of life. It is the key to a proper practice of *ahimsa* [non-violence] or love." (*GCW* XIII, 222-24)

Kumarappa did not press explicitly for high tariffs, but was nonetheless concerned about India's national interests. He would say, for instance:

"Every exporter of raw materials should realize that they are potential sources of employment and [so] their export to other countries causes unemployment in our country." (*KGD*, 21)

—and he warned against "American financial imperialism striving to fill the vacuum created by an inefficient [Indian] administration in the wake of the departure of British political imperialism" (*KCP*, last paragraph).

Economic localization *within* India was an important theme for Gandhi as well as for Kumarappa. Gandhi said:

"If we follow the swadeshi doctrine, it would be your duty and mine to find out neighbors who can supply our wants, and to teach them to supply them where they do not know how to proceed, assuming that there are neighbors who are in want of healthy occupation." (*GCW* XIII, 222-23)

of the indigenous [political] institutions" and to "restrict myself to my ancestral religion ... purging it of its defects" (*GCW* XIII, 219). Kumarappa's religious stance differed; he was a Christian.

271. With such remarks he distinguished his position from the more militant one of Bal Gangadhar Tilak (1856-1920), the leading Indian nationalist during World War I.

272. This means, "Thus use [what is] yours and do not harm what is not."

"Villages will be swept away if they are not self-sufficient as to their primary wants.... Self-sufficiency ... means all the cotton processes and growing of seasonal food crops and fodder for cattle. Unless this is done, there will be starvation. And self-reliance means corporate organization ensuring adjustment of internal differences through arbitration by the wise men of villages, and [ensuring] cleanliness by corporate attention to sanitation and common diseases.... And above all, villagers must be taught to feel their own strength by combined efforts to make their villages proof against thieves and dacoits [bandits]." ²⁷³ {GCW LXXV, 434}

This too was an ideal to be approximated merely to the extent feasible:

"Then every village in India will almost be a self-supporting and self-contained unit exchanging only such necessary commodities with other villages when they are not locally producible. {CG, XIII, 223}

Finally, individual self-reliance is at issue in the following remarks of Gandhi's which Romain Rolland recorded in his diary when Gandhi visited him in Switzerland for a week in 1931:

"There are three million unemployed in England.... If all the capital of the wealthy [there] were distributed among the unemployed [there], it would not last for long. I said to them, 'Help yourselves, return to your cottage industries.' A few modest experiments have been made in that direction in Wales; a few miners returned to their old trades and discovered that their salvation lay there. No man should live on another's help." {RGC, 83}

In the same set of remarks as recorded by Gandhi's secretary {RGC, 229}, the conclusion is, "Not one of them should be living upon doles."

Barter

A positive view of barter complemented Gandhi's dim view of money and his cherishing (for many years) of the caste system.²⁷⁴ After changing his mind about caste, he still sang at prayer a text of which the English translation (which he prepared himself and had his secretary send to the vice-roy) includes the following:

"We are inhabitants of a country ... where flows the Ganges of love.... All have their wants satisfied. Here all barter is just, here all are cast in the same mold.... No high, no low.... That country is within you—it is swaraj [self-rule], swadeshi, the home within you—Victory! Victory!" {PLP, I, 190-91}

273. He went on: "This is best done by corporate non-violence. But if the way to non-violence does not seem clear to workers, they will not hesitate to organize corporate defence through violence." This was written under chaotic war-time conditions.

274. See pp. 91-92.

In regard to providing material wherewithal to one's government, he said in 1939 (evoking the labor theory of value):

"Coins are but a measure of labor performed. They have no other value. If I buy a rupee worth of flour, I have paid for the labor of cultivation, carrying and grinding. Therefore ... it is the same thing whether I pay the State one rupee or its equivalent of labor as tax. Often it will be found that payment in labor invigorates the nation. [And indeed,] where people perform labor voluntarily for the service of society, exchange of money becomes unnecessary; the labor of collecting the taxes and keeping accounts is saved and the results are equally good." {GCW IX, 53}

Kumarappa's views on barter and on taxation by payment in kind were similar but more sophisticated and articulated in more detail.²⁷⁵ During World War II he was imprisoned for two years by the British for writing and publishing the following advice:

"The Government is inflating the currency to such an extent as to make it almost worthless.... We would advise villagers not to part with their commodities for paper money, but to exchange it against goods only." ²⁷⁶

Pantheism, ecology

Gandhi did not know the word "ecology," but did sense that globalized industrialism could become a macro-ecological menace:

"God forbid that India should ever take to industrialism after the manner of the West. The economic imperialism of a single tiny island kingdom [Great Britain] is today keeping the world in chains. If an entire nation of 300 millions took to similar economic exploitation, it would strip the world bare like locusts." {GCW XXXVIII, 243}

A pantheism conducive to a certain kind of ecological sensibility is expressed in a venerable Hindu mantra which Gandhi often cited:²⁷⁷

275. See pp. 35-36.

276. See VKQ, 100-105. The judge in the trial asked, "What would have been the result if the advice tendered in the article had been acted upon?" Counsel for the defence replied, "If the farmers of Bengal had done what was suggested, thirty lakhs of people [three million] would be alive still ... [who] have perished in the famine...." The judge replied, "My question did not relate to the people, but to the war effort as I am only concerned with the Defence of India Act." (At the end of the trial, the judge, upon congratulating the public prosecutor for his expertise, learned that the prosecutor had been guided by the prisoner, since no other economist would help him.)

277. From 1937 on, he praised it as conveying the essence of Hinduism {GCW LXIV, 258-60, 385 et passim; LXV, 89; XCVIII (Index of Subjects), 368}. It is the first mantra of the *Isha Upanishad*.

"Enveloped by the Lord is everything that moves in the universe. Enjoy with renunciation [and] do not covet that which is due to others."²⁷⁸

Population

There was no salient growth of population in India during Gandhi's youth, nor for some years after he returned from South Africa in 1915.²⁷⁹ He was inclined to disbelieve in the possibility of a population explosion:

"This little globe of ours ... has not suffered from the weight of over-population through its age of countless millions.²⁸⁰ How can it be that it is in danger of perishing of shortage of food unless birthrate is checked through the use of contraceptives?"²⁸¹ (GCW LXI, 417)

—or at least to downplay its economic significance:

"If it is contended that birth-control is necessary for the nation because of overpopulation, I dispute the proposition.... In my opinion, by a proper land-system, better agriculture and a supplementary industry, this country is capable of supporting twice as many people as there are today [in 1925]."²⁸² (GCW XXVI, 450)

278. The word *isa*, "translated here as 'Lord,'" can equally well be translated non-anthropomorphically as "ruling principle." The Sanskrit verb translated here as "covet" was normally intransitive, so the last clause is sometimes translated as a separate sentence: "Whose is it [anyway]?" Cf. note 272.

279. According to a recent British historian, "Between 1750 and 1900 the population of the subcontinent is thought to have increased from around 190 to 285 million; this was an annual rate of 0.3 per cent, ...well below ... that of a rapidly developing country like the United States, which experienced annual increases of 1.5 per cent.

"Demographic patterns did not begin to change from modest levels until the 1920s.... In 1921 the population had grown to ... 306 million." (SHI 264)

280. The traditional Hindu belief is that no new souls ever come into being, since everybody's soul has lived a previous life. (In referring to "countless millions" of years, Gandhi may have had in mind prehuman as well as human populations.)

281. Gandhi's opposition to the use of contraceptives was due in large part to the importance, in his own life, of stronger self-discipline than is thereby required. (He was by nature somewhat intemperate; strong self-discipline transformed him into a greater man than e.g. Mao Tse-Dung.) He said (GCW XXV, 544): "I have heard protagonists of birth-control arguing against regarding chastity as a virtue. And personally, if I were to admit that indulgence is a virtue, I do not see how we can escape the natural deduction that free love is also a virtue. That is my difficulty." When Margaret Sanger, the founder of Planned Parenthood, asked him to endorse the use of contraceptives, he told her that it is preferable and feasible for married couples to have sexual intercourse only once every two years in order to procreate at that rate, and that "women in order to control the size of their families must 'resist' their husbands [and], in extreme cases, leave them" (GCW LXII, 159; SA, 471).

282. The population of the Indian subcontinent is now more than four times as high.

Hence his famous motto (which Kumarappa did not use) that the Earth can always provide "enough for everyone's need," but nothing for "anyone's greed."



SOME BROAD COMPARISONS

In writings by Western authors ignorant about non-Western cultures I have sometimes found a dualistic tendency²⁸³ to reduce economic theory to two poles: "socialistic" vs "laissez-faire"; so I would like to outline a succinct set of comparisons — admittedly rough — among *three* modern schools of thought (though hardly claiming that they are all there is or ought to be) in regard to economics. This may provide some useful first approximations toward placing Gandhian ideas in relation to other categories more familiar to Western readers. I will use the term "orthodox" to include implicitly the "neo-orthodox" unless the latter are mentioned explicitly.

(Some of the roughness in such comparisons is due to giving various different meanings to the term "Marxism": an analytical method, a normative guide to action, a form of political organization, etc. And there are analogous problems with my uses of the term "orthodox." It is beyond my scope to sort out all these scholastic problems, but I should mention that since no government has ever been "Gandhian," the confusion about the meaning of that term may be not quite so bad.)

- The neo-orthodox dismiss as unscientific any **premiss of equal status** among humans. Marx's ideal for an ideal "higher phase of communist society" was: "From each according to his ability, to each according to his needs" (*MEW* XXIV, 87), but Marxists when governing have accorded higher status to Party members than to other people. Gandhians posit all healthy people to have equal, modest needs, but Gandhi preferred gross economic inequality to violence. He thought the inequality could by non-violent methods be reduced enough to become reasonably fair.
- The orthodox limit themselves in principle (and most Marxists in practice when they have governed) to closed **models** of the economy, and have treated **Nature** as a subordinate dominion to be exploited.²⁸⁴ Gandhians think in terms of an open model and stress that humankind has to fit in with the rest of Nature.
- Westerners in general, including the Marxists, associate **civilization** with cities, but Gandhi associated it with farming. The neo-orthodox

associate it with consumerism; but Gandhians enjoin, as essential to civilization, a modicum of self-discipline²⁸⁵ and voluntary simplicity for the sake of fairness and ecological balance.

- The orthodox regard **capitalism** as the highest possible stage of human development. Marxists see it as an inevitable stage of social development just prior to a revolution establishing the dictatorship of the proletariat. Gandhi considered it a big mistake committed by an immature culture. Kumarappa regarded it as an intermediate stage in a cultural evolution progressing gradually from savage to altruistic.
- The orthodox considered subsistence-wages "natural"; the Gandhians advocate a modest **material standard** of living; the neo-orthodox hold that everyone who matters will always have more and more affluence.
- The orthodox have exclusively high regard for **money**, but Gandhians have seen a positive role for **barter** and for tithing of crops as a way for poor farmers to pay their taxes without becoming beholden to money-lenders.
- The neo-orthodox want **bodily labor** to be minimized. Governing Marxists have tended to expect many people, but not Party leaders, to like doing it. Gandhi wanted everyone to do a proper share daily.
- The orthodox and the Marxists alike regard mass-production **factories** as efficient and therefore good. Gandhi and Kumarappa saw them as causing unemployment and wars, and on that account regarded the efficiency as illusory. The orthodox like **globalization**, but Gandhians want nevertheless as much decentralization as possible.²⁸⁶
- The orthodox want **government** not to disturb the power of the rich. Marxists have tried to have government manage the economy from top

283. A flagrant but nonetheless unduly influential example has been *HFC*.

284. A biblical sanction (*Genesis*, i, 28) is: "Be fruitful and multiply and replentish the Earth, and subdue it; and have dominion over ... every living thing." Most Christian capitalists have ignored the opinion of some modern theologians that "dominion" here means custodianship.

285. See note 196. If Gandhi expected too much in this regard, this was partly because his method of civil disobedience, which required it, was more successful than anyone else expected. However, to practice voluntary simplicity in India in his day was not as hard as it is nowadays in affluent societies permeated by propaganda against it.

286. Kropotkin (see p. 63) had been, already by 1882 (according to a friend who discussed economics with him), of the opinion that "concentration in industrial processes was only a passing phase ... which had reached its greatest intensity during the period in which steam was the main motive power in production," whereas "the full development of the era of electricity would show a return, in large measure, to small industry of individual production, owing to the fact that, unlike steam power, electricity can be split up without losing its efficiency." (*WAP*, 185)

to bottom. Gandhi wanted central government to establish conditions whereby village councils would manage the economy.

- The orthodox say that **imperial Britain** in India bore the "White Man's Burden" of ruling and uplifting the backward races. Gandhians say that she also drained India's wealth like a parasite. Marxists say she was an instrument of history.
- Marxists have tended to see **means vs ends** as a non-issue (considering the course of history to be inevitable anyway). The orthodox believe in an "invisible hand" making individual greed yield social benefits. Gandhi believed in a law of karma such that neither greed nor evil methods can be expected to yield good results.²⁸⁷
- In their **psychological premisses**,²⁸⁸ the orthodox posit a greedy "economic man"; Marxists regard humanity as characteristically engaged in class conflict; Gandhians posit a potentially responsible social animal motivated by "affections" (to use Ruskin's term) because the soul is (to put it in a Hindu way) divine and therefore subject to moral appeal.²⁸⁹
- In some of their most characteristic **styles of thought**, "physics-envy" causes orthodox economists to publish mathematical graphs deriving authoritative-looking conclusions from simple-minded assumptions; Marxists use Hegelian dialectics; Gandhians dwell on ethics (which the orthodox categorically exclude in the name of science).

Gandhi held that people deficient in ethical sensibility suffer from a certain kind of alienation — i.e. alienation from the divinity of their own souls — which is curable by non-violent methods; and he was, as everyone knows, adept at inventing such methods. But some of his moral expectations were so extreme, at least by modern Western standards, that his psychology provides no more adequate a basis for economics than does the orthodox Western economist's psychology of economic man. Kumarappa attributed a more positive role than Gandhi did to money, and his political thinking depended less on Gandhi's concept of trusteeship among the rich than on a hope of enlightened government policies enabling the working poor to fend off unfair exploitation by the rich.

287. Hence Gandhi's dim view of violence (which he always regarded, however, as better than cowardice).

288. See pp. 157-58.

289. The use of such appeal lay at the heart of Gandhi's greatest invention, now called win-win conflict-resolution.

SOME EXAMPLES OF LATER DEVELOPMENTS

To "place" a person or thing historically, one should have a sense of the most relevant aspects of history afterwards as well as beforehand. In this section I will provide, for readers to whom the panorama in Section 1 may have been useful, a few snapshots of how some relevant aspects of economic thinking have developed since Kumarappa's day.

A modern welfare economist

The most eminent modern representative of welfare economics²⁹⁰ is Amartya Sen (born in 1933). To describe his relation to Gandhian economics, one should begin by noting that he has been like Gandhi to the extent of being a 20th-century thinker from India who, after studying in England, won a good reputation worldwide. He is very courteous (avoiding sarcasm²⁹¹ in order not to shut the hearts of the as yet unpersuaded), and expresses such regard for the Kantian categorical imperative²⁹² that he conveys to the reader a sense of concern about the poor and the oppressed:

"It would ... be a mistake to see the development of education, health care and other basic achievements *only* or *primarily* as expansions of 'human resources' — the accumulation of 'human capital' — as if people were just the *means* of production and not its *end*... [However,] basic education [and] good health ... are *not only* directly valuable as constituent elements of our basic capabilities, these capabilities can *also* help in generating economic success of a more standard kind, which in turn can contribute to enhancing the quality of life even more ... [although] the political economy of actual use can be very different from the potential possibilities generated." (SER, 6)

290. MWS is a British sociologist's account of the history (in practice) of the concept of the welfare state in 20th-century Europe. SPO traces the development of welfare-state provisions in the USA in the first quarter of the century.

291. Gandhi during his first few years in South Africa made some use of British-style sarcasm, but later avoided it — apart from occasional lapses of discipline — because it obstructs reconciliation. (I doubt the rumor that when asked for his opinion of Western civilization, he said "It would be a good idea"; but see note 196.)

292. Immanuel Kant's "categorical" moral imperative (originally described in KGM) includes the idea of treating people "never simply as a means" (as is done latently in the "human-capital" concept; see p. 73), "but always at the same time as an end." Sen may have seen this Kantian idea applied in DAG, 122 to economic development (and that of "capabilities" in DAG, 128). Gandhi encountered it in an American collection of essays (SER) where it occurs in statements like "The solution of the industrial problem ... is in treating every man in our employ not as a tool, but as a man." Gandhi published in 1907 a book-length paraphrase in Gujarati of most of these essays (including the one where this sentence occurs) and this is the first of the "basic works" in Vol. IV of his publisher's six-volume edition of his *Selected Works*.

The following compassionate remarks suggest how the Gandhian praise of self-discipline²⁹³ and of voluntary poverty²⁹⁴ can abet a "my-Nigras-are-happy" complaisance about injustice:

"Our mental reactions to what we actually get and what we can sensibly expect to get may frequently involve compromises with a harsh reality. The destitute thrown into beggary, the vulnerable landless laborer precariously surviving at the edge of subsistence, the overworked domestic servant working round the clock, the subdued and subjugated housewife reconciled to her role and her fate, all tend to come to terms with their respective predicaments.... Consider the person (call him 1) who has learned not to have overambitious desires and who is easily pleased. Take a case in which he is much more deprived in terms of food, clothing, shelter, medical attention etc. than person 2 (raised in more buoyant circumstances), and is nevertheless happier than 2 and has more [of his conscious] desires fulfilled. It is not at all obvious that 1 must be seen as having a higher level of well-being than 2." {SCC, 15}

A paper co-authored by Sen quite early in his career {RSM} is said to have helped justify the unsuccessful attempt, in India's second Five-Year Plan (1956-61), to generate employment through capital-intensive growth.²⁹⁵ His first book, *Choice of Techniques* (1960), was in effect an inquiry into the economic ethics of technology, and ends with an appendix on spinning and weaving which reckons that hand-spinning (championed by Gandhi)²⁹⁶ is hopelessly inefficient, but as for weaving:

"The case for hand looms or for power looms is much less straightforward than the Hand Loom Board of India on the one hand or the Millowners' Association of Bombay on the other seem to suggest.... [The best choice] will depend ultimately on social factors (like the wage rate or the propensity to consume), political possibilities (like those of taxation), organizational considerations (like those influencing the marketing lag) and ethical factors (like the choice involving time). It was not the object of this study to make any policy recommendation. But if we had to make one, we should only point out that the problem must be put in its proper socio-economic setting and should not be treated as a purely technical question of choosing the most 'efficient' method of weav-

ing cloth. It is ultimately a human problem, not an engineering one." {SCT, Appendix D, conclusion}

I may note here that Kumarappa in 1939 had argued:

"We would need Rs. 300 crores of capital employing 33 lakhs of people [3.3 million] if we supplied all our requirements [of cotton for India] by mill production, while we would require about Rs. 72 crores of investment employing 800 lakhs of people [i.e. 80 million] if [all] our supply were to come from cottage units. The two methods have their undoubted advantages.... We are poor [in terms of money] but we have an ocean of labor wealth. Therefore an intelligent plan will find that the cottage method fits into the scheme for our country.... Centralized ... production, whatever may be its capacity to produce, is incapable of finding employment for as large a number of persons as we have to provide for.²⁹⁷ Therefore it stands condemned in this country." {GUP I, 32; cited in GCWLXX, 105}

Sen has deconstructed, to the satisfaction of all his fellow academics, some prestigious tenets of neo-orthodox philosophizing. He revealed, for instance, an unexpected way in which the term "Pareto optimum"²⁹⁸ is misleading {SWM, iv}, and he demolished a dauntingly scholastic theorem {ASC} to the effect that if certain apparently reasonable theoretical assumptions are postulated, then it appears that programmatic social choices about complex matters cannot be made democratically but have to be imposed (and therefore welfare economics, in order to have practical significance, must entail dictatorship). Sen showed, in detail and with an equally daunting use of symbolic logic {SCW}, that the theoretical problem can be solved by replacing one of the assumptions with an equally reasonable and more realistic alternative.²⁹⁹ No Gandhian has done anything of the kind.

293. See note 196.

294. See pp. 97-98.

295. Sen and his co-author are said {JOS} to have assumed "that the complex technologies of capital-intensive growth would be run as efficiently as the simpler technologies of labor-intensive growth, and that the investor — private or public — would be able to free the surpluses [gained by capital-intensive growth] for re-investment. [But] in fact, [the more complex technologies] proved harder to manage, and the rise of powerful trade unions ensured that whatever surpluses were generated went largely into higher salaries for the existing work force." (See also JES.)

296. See pp. 106-08. Sen's grandfather, K. M. Sen, was a secretary to the great writer and educator, Rabindranath Tagore, who quite disagreed with Gandhi's ideas about spinning (and who suggested the name "Amartya" when Sen was a new-born infant).

297. A typical example of Gandhi's way of making the argument is the following from a letter of 1934: "What applies to America and England does not necessarily apply to India. India has in her teeming millions so many superfluous days that she does not need to free the energy of her sons for superior or more remunerative work through highly developed machinery. In her 350 million children she has so many living ready-made machines, and if she can utilize their labor, half of which is running to waste, the double starvation of the body and the mind will cease." {GW LIX, 324}

298. See note 210.

299. An eminent American economist, Paul Samuelson, upon hearing that Sen might try to do this, predicted that the attempt would "not so much provide an escape from the Impossibility Theorem as a plunge into a new Impossibility Theorem." {SCP, III, 416} According to Samuelson, the Impossibility Theorem proved merely the impossibility of "what I prefer to call 'a political constitution function'," but not "the impossibility of a social welfare function." {SCP, III, 409} He was referring, however, to a development, in which he took part, in "New Welfare Economics" (see note 210).

By careful historical analysis Sen has shown also that the worst modern famines have been caused not so much by inadequacy in regional supplies of food as by large numbers of people lacking "entitlement" to it; and indeed:

"Famines can arise in overall *boom* conditions ... if the boom takes the form of uneven expansion.... In the fight for market command over food, one group can suffer precisely from another group's prosperity, with the Devil taking the hindmost.³⁰⁰ The law stands between food-availability and food-entitlement. Starvation deaths can reflect legality with a vengeance."³⁰¹ {*SPF*, 164-65}

Kumarappa's first book (1930) mentions that before the British took over, there had been local famines in India due mainly to "shortage of grain following a drought" and to "inadequate facilities of transport ... making relief work an almost insuperable difficulty," but that the larger famines under British hegemony were due instead to "lack of purchasing power" (*KPF*, 11). Further analysis and his proposed remedy are described in a letter sent (by someone else) to Gandhi in 1947:

"Under the present trading system the grain produced in the villages is being sent out. Therefore in many parts of the country the villages are left with no stocks of grain. As a result the poor have to face hardships and there is a steep rise in prices during the monsoon. To save the poor from such a plight ... some grain should be stocked in villages under the care of [the village government], and only the surplus should be sent out. ... Mr. Kumarappa has acknowledged the need for such a scheme in his plan." {*GCWXC*, 275}

Sen believes that people in democracies will see to it that food-entitlements are adjusted to prevent a famine occurring in their midst, and thus "famines occur only under authoritarian rule."³⁰² He comes perhaps closest to a Gandhian assertion when he says:

"Space does not have to be artificially created in the human mind for the idea of justice or fairness.... That space already exists." {*SDF*, 262}

Sen's work on devising indices for welfare and deprivation has been influ-

ential³⁰³ and is theoretically much better than Kumarappa's rule of thumb for gauging the local effectiveness of community-development programs: Kumarappa said that rather than reckoning quantities of roads built, wells dug, fertilizers distributed etc., one should at the outset select at random a half-dozen poor persons and count their ribs, and "if after three years of implementing the community-development program there is some flesh to cover the ribs, then I will call it a success." {*GM XIV*, 313}

Two topics which Sen has avoided, however, are alienation (presumably because he regards it as a symptom rather than a cause of socio-economic conditions) and ecological degradation. He cherishes Marx's ideal of "replacing the domination of circumstances and chance over individuals by the domination of individuals over chance and circumstances" {*FL*, 10},³⁰⁴ so he focuses much less on how ecological degradation can have devastating economic consequences than on how ecological concern can divert the affluent from caring about other people's current deprivations:

"The moral obligation underlying sustainability is an injunction to preserve the capacity for future people to be as well off as we are. This has a terribly hollow ring if it is not accompanied by a moral obligation to protect and enhance the well-being of *present* people who are poor and deprived.... Any instrumental justification for human development is not gripped by some impersonal objective such as conserving the environment, but relates concretely to *people's* ability to generate for themselves more income and other means of good living." {*SAS*, 13-14}

The effects of recent and current ecological degradation upon humanity's future cannot be predicted with assurance;³⁰⁵ so, Sen may have despaired of being able to write about it in a way that would be reasonably secure against ideological attacks damaging his capacity to exert a good influence in regard to current poverty. Whatever the reason, he belittles implicitly the possibility that a devastating ecological crisis could ever occur, and the following passage implies even that future generations will have merely "tastes and preferences" and no longer any basic needs for particular things like breathable air, drinkable water etc.:

300. Kumarappa's use of such a phrase is cited on p. 40.

301. A salient first-hand account from Orissa is translated in *CML*, 322-323.

302. *Time*, European edition, 29 May 2000, p. 62. (In this mini-article Sen says that modern China, "which did much better than India in several respects such as the spread of basic education and health care, had the largest famine in recorded history in 1959-62, with a death toll that has been estimated at thirty million." That estimate is due to *APF*. *CPC* and *APC* had been the first reports of such a famine. One of Sen's other references to it is in *SNR*, 34.)

303. He has been president of the Econometric Society (as well as of the American Economic Association and of the International Economic Association).

304. Sen used this phrase in discussing one of his books (*SDF*; see note 43) and said, "The basic approach [in the book] is that individual advantage is to be judged by the substantive freedom that the individual enjoys and that development is the process of expansion of individual freedom. As Marx put it..."

305. *RMM* is a recent discussion of this point, apropos an obfuscating book (*LSE*).

"The fact of substitutability (in both production and consumption)³⁰⁶ implies that what we are obligated to leave behind is a generalized capacity to create well-being, not any particular thing or any particular resource.... We do not know what the tastes and preferences of future generations will be, and what they will do."³⁰⁷ {SAS, 11}

This is ideological³⁰⁸ and pre-empts the question of whether an ecologically unsustainable economy could ever cause any substantial damage to humanity. It seems to me that Sen's quite substantial contributions to the theory of welfare have been complemented by a dragging of feet in regard to ecological economics.

Two "neo-institutionalists"

The most famous "neo-institutionalist" economists of the second half of the 20th century, Gunnar Myrdal (1898-1987) and John Kenneth Galbraith (1909-2006), are known for their achievements in government service as well as for their writings.

In the USA, Galbraith directed the Office of Price Administration during World War II (when price limits were set by the national government) and served in the 1960s as an economic advisor to John Kennedy and as the American ambassador to India, meanwhile teaching as a professor at Harvard University and editing a popular journal for businessmen (*Fortune*). One reason why he is considered {GCT, ch. IV} a neo-institutionalist is that he dwelt upon the power of big corporations to generate, by means of the media, foolish economic behavior — such as "an atrocious allocation of resources between private wants and public needs" {GNY, 39} — and by various means to control government policies and, indeed, economic theory:

"[Modern] economic theory [in the USA] has managed to transfer the sense of urgency in meeting consumer need that once was felt in a world where more production meant

more food for the hungry, more clothing for the cold, and more houses for the homeless to a world where increased output satisfies the craving for more elegant automobiles, more exotic food, more erotic clothing, [and] more elaborate entertainment.... Although the economic theory which defends these desires and hence the production that satisfies them has an impeccable (and to an astonishing degree even unchallenged) position in the conventional wisdom, it is illogical and meretricious and, in degree, even dangerous." {GUS, ch.X}

Here, the list of consumerist desires ("elaborate entertainment" etc.) is an American counterpart to Kumarappa's illustrative list³⁰⁹ of seductive amenities accorded to factory workers in England a generation earlier ("clubs, tea rooms, games, cinemas, good housing"); the word "meretricious" is a counterpart to Kumarappa's metaphor of the bullock's nose-string;³⁰⁹ and the word "dangerous" is probably a coy allusion to such problems as Kumarappa pointed out when he referred³¹⁰ to the indispensable role of "the bayonet" in ensuring the flow to large factories of raw materials from abroad "for production at an 'economic speed'." But Galbraith believed, unlike Kumarappa, that "big" is inevitable, and he was optimistic that it could be made beautiful by the application of more intelligence than was to be found in the "conventional wisdom" of orthodox economists.

Gunnar Myrdal attained greater international eminence. His intelligent devotion to socio-economic justice in Sweden contributed a lot to the transformation of that country from one bedevilled by poverty (and therefore abandoned, between 1840 and 1930, by a quarter of its population emigrating to North America) into a successful welfare state. After studying law in order "to see how society functioned" {APM, 147}, he had taken, at his wife's suggestion, a doctorate in economics and had earned a reputation in the late 1920s and early '30s as a brilliant orthodox economist³¹¹ (though not an advocate of *laissez faire*; his ideas had been, he later said {APM, 147}, "in advance of Keynes"). During a Rockefeller Fellowship in the USA in 1929-30 he helped found the Econometric Society

306. An example of substitutability is the use of e-mail instead of pony express.

307. This was written for a publication issued in behalf of the UN in 1994. Its intended effect within the UN was presumably to counteract in some way the impact of such ideas about a transition to ecological sustainability as are found in *PTL* (a UNESCO publication of 1992).

Sen has apparently not noticed that modern ecological degradation is aggravating already the conditions of the poor more than of the affluent.

308. Arguments in this vein are routine among neo-orthodox economists promoting consumerism. (See for instance the conclusion of *SDE*.) They disregard arguments such as cited above on p. 76 and the well-known theoretical finding {DER} in their own academic field that indefinite growth depends on a proper modicum (not to be taken for granted *a priori*) of substitutability. See apropos *LCE* (and *EBR*).

309. See pp. 44-45.

310. See p. 34.

311. At the London School of Economics, which had been founded to promote historically oriented economic thought in opposition to Marshall's theoretical approach at Cambridge, Lionel Robbins became a professor in 1929 and brought in, to help support his own anti-historical outlook, a Viennese *laissez-faire* ideologue, Friedrich von Hayek, who in turn arranged for the publication of a German translation {MGA} of an essay by Myrdal on monetary equilibrium. {JSS, 23}

in order to defend "the purity of theoretical economics" against "the naïve empiricism" of the "institutionalists who were getting so damn mighty in America" (*APM*, 42, 48); and yet also he and his wife, he later recalled,

"saw ... the race questions, slums and all of that. At that time we became politically conscious... [and] saw [that] political interference [by the government] in society is a [worthwhile] purpose in life." (*APM*, 1491)

When the Swedish Social Democratic Party was — after months of civil strife in Sweden — voted into power in 1932 (*WS*, 10-11), he took a leading role in forming government policies during the next few years,³¹² and thereby

"found that my [economic] theory left me with tools that were inadequate for the study of social reform. Such a study could not rationally be confined to economic factors like production and distribution, but had to be conceived in terms of practically all human relations." (*MUS*, 2-3, cited in *APM*, 61)

At the invitation of the Carnegie Foundation he spent 1938-42 studying "the Negro problem" in the USA and writing up his findings in what he later regarded (*APM*, 161) as his "best [and] most important" book (*MAN*). This work brought him decisively to an institutional approach wherein (*GAP*, x) "history and politics, theories and ideologies, economic structures and levels, agriculture and industry, population developments, health and education, and so on" are "studied not in isolation but in their mutual relationships." He attributed to technology a less basic role than Veblen (or for that matter Galbraith).

In due time Myrdal found — contrary to his own carefully argued previous belief — that all thinking about economics is permeated with implicit if not explicit ethical precepts (and economists who cannot see this cannot be scientific) and that (*MRP*, 115) "the individual, and thereby also society, can be improved by social reform" promoted actively by government subsidies

312. The Myrdals' work on population was "the first decisive infusion of modern social science into the shaping of public policy. Alva and Gunnar Myrdal used the sharp decline in the Swedish birth rate to justify a fresh phase of social reform ... and a new vision of the individual's and the family's relationship to the central state." Gunnar Myrdal's arguments at that time included the following: "The program must be in the last analysis: a new society imbued with social solidarity, where the whole nation in the broadest manner takes on general responsibility for those children who shall be the next generation. As the first step towards this new social reality, it will be necessary to destroy the narrow individualism which now poisons our nation's whole life." (*CSE*, xi and 119)

for education, health-care, family housing and services, etc. (The Swedish Social Democrats had long since abandoned many Marxist precepts such as "expropriation of expropriators" and nationalization of the means of production (*TSS*, 207-08 *et passim*). They were content with legislated regulations and socially beneficial programs paid for by high tax-rates for the rich.)

He served the Swedish government again in the mid-1940s (for instance as chairman of its Economic Planning Commission) and then the United Nations for ten years as head of the the Economic Commission for Europe. Then in 1957, when his wife was the Swedish ambassador to India, he undertook a study of South Asia, published ten years later as *Asian Drama: An Inquiry Into the Nature and Causes of the Poverty of Nations*.³¹³ Here is a brief sampling of the many references to Gandhi and his ideas:

"Until Gandhi's crusade, social and economic reform was discussed very little ... in India or anywhere else in South Asia. (*MAP*, 753)

"In the real world ... [his] trusteeship idea is nought but a vision of a society where the rich are charitable so that the poor can remain weak.... By his stress on the principle of trusteeship, and his friendliness toward many in exalted economic positions, he established a pattern of radicalism in talk but conservatism in action that is still very much a part of the Indian scene." (*MAP*, 755-56)

"[A]gricultural work is not diligently carried on.... A few South Asian leaders have commented on this deficiency in moralistic terms. Gandhi referred to the 'classical laziness' of his countrymen.... He hoped that efforts to maintain and expand village manufacturing ... [entailing] a heavier work schedule would ... instill healthier attitudes toward work, and raise the general cultural level." (*MAP*, 1080, 1235-36)

"[Gandhian-type] self-sufficiency at the village level cannot produce impressively high standards of living, as judged from the standpoint of an outsider; and it can only be sustained when buttressed by a discipline of frugality and wantlessness that other Indian leaders consider too rigorous." (*MAP*, 1210)

"Gandhi's ... glorification of self-employment ... reflects deeply engrained social prejudices.... Although Gandhi was not unsympathetic toward coöperative methods, he was more disposed to stress the virtues of self-reliant, family-based handwork within a self-sufficient village community....

One group of enthusiasts for village growth has ... pushed the Gandhian ideal of village self-sufficiency into the background by urging policies that would make it possible for village artisans to enter a wider market.... [W]hether the market for the products of cottage industry can be substantially extended ... depends ... [partly] on the quality and uniformity of craft products." (*MAP*, 1215-16, 1220)

313. This 2300-page tome was banned (*APM*, 82) in Pakistan and even briefly in India. Myrdal followed up with a 500-page set of recommendations (*MAP*) for a worldwide anti-poverty program.

"The costs of promoting cottage industry have been heavy and seem to have risen with time.... [However,] if Western readers are shocked by the magnitude of the subsidy to the Indian handloom industry, they should recall that government assistance to agriculture in countries like the United States or Sweden bears a broadly comparable relationship to the net income arising from the main staple crops. But, of course, these latter countries are much more affluent and can afford such aid. Furthermore, as their agricultural labor force is rapidly decreasing, it is possible to look on the payment of a subsidy as a temporary expedient." {MAP, 1233-34}

("[Yet] to confine planning efforts to building up enclaves of modern large-scale industry ... is to invite failure on a grand scale." {MAP, 1240})

"Gandhi's revolutionary proposal of 'basic education' as a means of making primary schools more responsive to the needs of everyday life ... was in line with modern theories of 'learning by doing'.... But the exclusive attention Gandhi paid to ... the rural village ... gave his propaganda for basic education an intimation of hostility toward change, mobility, and development." {MAP, 1737-38}

"In India, almost up to the publication of the preliminary results of the new (1961) census, it was still common to refer to a yearly increase of population of four to five million, though the rate of increase was about twice that amount. Even now when the very rapid population increase is accepted as an abstract fact, its serious implications are seldom considered and all sorts of false ideas are entertained as protection against the truth." {MAP, 720}

"India's population policy as announced in the First Plan bowed to Gandhi's censorship of artificial means of contraception.... [And,] that 'the State can never control populations whether it be a drive for increasing or lowering the birth rate' was the opinion in the early 1950s of a prominent member of Congress, Sushila Nayar, who later became Minister of Health in charge of family planning. Such a view is often combined with trust that birth control will spread spontaneously when levels of living have improved. It is not necessarily invalid under all circumstances: the type, scale, and intensity of the government's effort³¹⁴ are the determining factors." {MAP, 1510}

In New Delhi in 1973 Myrdal told the One-Asia Assembly:

"Gandhi was certainly a planner [*sic*], and a rationalistic planner, but his planning was all-embracing and laid its main stress on sanitation and health, the raising of nutritional levels by more intensive agriculture, a redirection and not only an expansion of education so that it became 'basic' and not merely literary and 'academic', and a redistribution of wealth and land to create greater equality.

"It is only in the latest years that we have more generally come back to Gandhi's ideas.... 'Integrated planning'... is the modern term for what Gandhi was all the time teaching. My Indian friends will not be offended when I say that if Indian planning has

not been more successful than it actually has been, the main explanation is that they have not kept so close as they should to the fundamentals of [his] teachings.

"...Egalitarian reforms ... belong to the most profitable national investment a government in an underdeveloped country can undertake.... Luxury consumption for the upper strata must be restricted. In a country like India this must imply a rather radical change in the functioning of the whole licensing system.... This type of austerity in the consumption and living patterns of the rich is what Gandhi ... was demanding from them. Many in Asia would perhaps say that simple living is a tradition or even an Asian value. In the West we call it a legacy of Puritanism. In both types of countries we are now very much in need of cutting down a lot of unnecessary consumption. In the West, ...restriction of less necessary consumption is needed fairly low down in the income brackets in order to stop inflation and also to raise the 'quality of life' as our environment is threatened by our affluence...." {MOA}

Myrdal never cited Kumarappa — and yet it seems to me that Kumarappa had anticipated some of his basic methodological points, albeit in a rougher way conceptually and/or rhetorically:

MYRDAL

"A major vehicle for introducing serious biases into research on South Asian problems has been the uncritical application of concepts and theories that have been developed in, and have validity for, another region or group of countries." {MAP, xiii}

"[V]alue premisses ... should be chosen ... that ... reflect actual valuations held by people who are concerned with the problems being studied." {MAP, 49}

MYRDAL

"[F]igures ... confidently quoted in the literature, such as those pertaining to trends in income, population, literacy and school enrollment, proved to be... often palpably wrong." {MAP, xi}

KUMARAPPA

"India presents such a bewildering variety of economic problems that it is not easy for one steeped in Western economies to appreciate conditions [here], still much less to understand the program put forward by national [Gandhian] leaders. These variations from accepted formulas are largely due to the unique course of Indian history and the standard of values developed as part of its culture and religion." {OEB, 29}

KUMARAPPA (abstracted by Gandhi)

"The survey of 606 villages revealed ... that the average income of the villager[s] ... was no more than Rs.12 ... [even though] the ... scientist who relies for his figures on books ...has been taught to believe that it is anything between Rs.60 to Rs.80."

Although Myrdal's book had little influence in India apart his concept of a lamentably "soft state" there, it may have helped influence the World Bank (under Robert McNamara) to encourage Western banks to lend vast sums to India in the 1980s.

314. I think that Myrdal here meant efforts to promote family planning and that his *non-sequitur* (since the word "spontaneously" implies something happening *without* the government promoting it) was due to his belief that such efforts were vital.

The "Nobel Prize"

Since the words "Nobel Prize" and "science" carry vast prestige, I should mention that whereas Alfred Nobel endowed in his will (1894) a set of annual prizes for "those persons who during the previous year have rendered the greatest service to mankind" by way of physics, chemistry, medicine, literature and peace-making, the Central Bank of Sweden established in 1968 a "prize in economic science in memory of Alfred Nobel" (who was not an economist) in order to promote the reputation of orthodox economics. To make it seem like a genuine Nobel Prize, the winners are chosen by a Swedish committee and give their acceptance speeches at Stockholm University. But it has less prestige, and was, for instance, awarded in 1996 for a mathematical scheme showing ostensibly how to get rich for certain by dealing in junk bonds.³¹⁵

Open-system economics

In order to take proper quantitative account of material interactions between human society and the non-human parts of nature, an economist has to understand a considerable body of scientific concepts and sets of information that are deliberately ignored in orthodox economics. (Kumarappa made, as we have seen, a fair start and published dozens of articles on agricultural chemistry.) Open-system economics and ecology are nowadays such strong fields of study³¹⁶ that it is far beyond my scope to trace

315. The prize-winners then advised an investment firm which lost huge sums in behalf of middle-class Americans. (The Bank's committee gave its prize the next year to Amartya Sen (see pp. 118-122) for work published many years before.) An equally notable award was the one in 1994 for an article on game theory (see *NBM*, xlviii). One kind of economist who would more recently be given the prize is the kind that uses the term "ecological rationality" to mean, not a rational approach to ecological problems, but "fast and frugal decision making" according to "homegrown principles of action, norms, traditions and 'morality'" rather than as a result of "conscious deductive processes of human reason" (*SCE*, 465, 467, 469-70). Such economists use the fashionable word "ecological" while still championing a closed theoretical scheme.

316. In the USA, a familiar political argument against taking ecological degradation seriously has been that more study is needed. In reports prepared by the executive branch of the federal government in the Bush-Cheney administration, statements suggesting that something should be done about it were deleted by the president's or vice-president's staff. *BGS*, *EBR* and *RGB* survey some of the methods applied (as of the mid-1990s) internationally to protect vested interests by subverting the environmental movement.

their modern development or describe their current state;³¹⁷ instead, I will describe briefly two famous writers and two recently developed concepts that seem relevant to placing Kumarappa in relation to the history of open-system economics in the second half of the 20th century.

Rachel Carson (1907-64) was a naturalist in the USA who worked for the national Fish and Wildlife Service (a government agency) from 1936 to 1952 and wrote books educating Americans about some aspects of ecological integration and degradation. Her first famous book, *The Sea Around Us* (1951), conveys in scientific detail a sense of wonder at the beauty of it all; but also, one chapter describes how:

"man ... has written one of his blackest records as a destroyer on the oceanic islands. He has destroyed environments by cutting, clearing, and burning;... almost invariably he has turned loose upon the island a whole Noah's Ark of ... non-native animals as well as plants. Upon species after species of island life, the black night of extinction has fallen.... Most of man's habitual tampering with nature's balance by introducing exotic species has been done in ignorance of the fatal chain of events that would follow." (*CSA*, 93-95)

In the preface to the second edition of her next book, *The Edge of the Sea*,³¹⁸ Carson remarked that

"there has long been a certain comfort in the belief that the sea ...was... beyond [man's] ability to ... despoil. But this belief, unfortunately, has proved to be naive. In unlocking the secrets of the atom modern man has found himself confronted with a frightening problem — what to do with the most dangerous materials that have ever existed in all the Earth's history, the by-products of atomic fission. The stark dilemma that faces him is whether he can dispose of these lethal substances without rendering the earth uninhabitable." (*CES*, xi)

Her last book, *Silent Spring* (1962), was about pollution of the Earth's food-chains due to indiscriminate use of such chemical pesticides as DDT (invented during World War II) and arsenic. Her view that chemical pesticides should be used selectively (*CSS*, 75) is reminiscent of Kumarappa's

317. Some relevant current journals are *Ecological Economics*, *Ecology*, *Ecology Letters*, *Ecological Indicators*, *Ecosystems* and *Environment and History*; some comprehensive surveys: *BEE*, *BRP* and *HNE*; a short book with essays by eminent economists: *PTL*; some websites: earthwatch.org, ecoeco.org, earth-policy.org, esa.com, ilsr.org, isec.org, nationalgeographic.com, neweconomics.org, oneworld.org/itdg, nonviolence.org/tranet, nwei.org, schumachersociety.org and wupperinst.org.

318. I have mentioned (see note 217) that early ecological studies tended to deal with shores, lakes and their environs.

view³¹⁹ that soil technicians should advise Indian farmers, on the basis of a local analysis, as to which chemical fertilizers to use and how much.

Carson wrote so well and with such integrity and impeccable mastery of the relevant scientific information that the inevitable attempts to discredit her³²⁰ augmented her impact and thereby helped to open up some cultural "space" in the USA for the development of open-system economics.

In the 1970s and '80s, E. F. Schumacher's *Small is Beautiful: Economics as if People Mattered* had quite an impact on enlightened public opinion in England and to some extent in North America. Schumacher (1911-1977) was German-born but studied at Oxford as a Rhodes Scholar and settled in England (after some years as an investment banker and university teacher in the USA). He was a brilliant economist; Keynes in 1946 said:

"If my mantle is to fall on anyone, it would only be or Fritz Schumacher. can do anything with figures, but Schumacher can make them sing." {WPS, 135}

From 1950 until 1970 Schumacher was economic advisor to the nationalized coal industry in Britain (which is not to say that the National Coal Board followed all his advice). Already in 1945 he had told his wife:

"In England we are fighting for a system of Government and economic administration that is based on the notion that every human being *matters*. We are fighting against that callousness towards the ordinary man which has been the hallmark of capitalism." {WPS, 179}

And he had come to believe — perhaps from his work in war-torn Germany in 1945-46 as economic advisor to the administrators of the British-occupied zone — that there are generally

"two primary factors in the economy — food and fuel — [and] everything else [is] secondary." {WPS, 222}

It was presumably his work for the Coal Board that brought him, by 1954, to the view that:

"mankind ... for many thousands of years ... always lived off income ...[but]... in the last hundred years has ... broken into Nature's larder and now is emptying it out at a breathtaking speed.... The whole problem of ... the exhaustion of non-renewable resources can probably be reduced to this one point — Energy. If one asks about the future of the economy, ultimately one is asking about the future of an energy economy." {WPS, 241}

319. See p. 57.

320. *BRC* and *MRC* include accounts of her work and its reception.

In 1955 he took a three-month leave of absence from the Coal Board in order to visit Burma and advise her government on economic development. While there, he came to believe {WPS, 247} not only that "the science of economics ... is derived from a view of the meaning and purpose of life," but also that Gandhi "had laid the foundation for a system of economics," that "economic 'progress' is good only to the point of sufficiency, beyond [which] it is evil, destructive [and] uneconomic," that:

"an 'economic expert' steeped in Gandhian economics would undoubtedly ... say: 'Local, short-distance transportation should receive every encouragement, but long hauls should be discouraged because they would promote urbanization, specialization beyond the point of human integrity, [and] the growth of a rootless proletariat.'"

and that:

"a Buddhist economy would make 'the distinction between "renewable" and "non-renewable" resources.' A civilization based on renewable resources, such as the products of forestry and agriculture, is by this fact alone superior to one built on non-renewable resources, such as oil, coal, metal, etc.... The New Economics would be a veritable 'Statute of Limitation'³²¹—and that means a Statute of 'Liberation'." {WPS, 248}

He declared at the University of London in 1956:

"We must now live without war,³²²... [and] on income rather than capital (exhaustion of fossil fuels, etc.). Both these tasks require the attainment of a higher level of consciousness, called AHIMSA or non-violence.... If we want to preserve human civilization we must learn 'non-violence' in *all* activities—not only politics but also economics medicine, agriculture, horticulture, industry, etc." {WPS, 266}

—and in an article of 1960 entitled "Non-Violent Economics":

"A way of life that ever more rapidly depletes the power of Earth to sustain it and piles up ever more insoluble problems for each succeeding generation can only be called 'violent.' It is not a way of life that one would like to see exported to countries not yet committed to it.... Economics ... must be led back to an acceptable philosophical base. Present-day economics, while claiming to be ethically neutral, in fact propagates a philosophy of unlimited expansionism without any regard to the true and genuine needs of man which are limited." {WPS, 292}

321. He applied the concept of limitation more narrowly than Gandhi had done. Gandhi in his mid-30s, when his fourth child was born, took a vow of mutual chastity with his wife, whereas when Schumacher's first wife died he married (at the age of 50) his housekeeper and had four more children beyond the four from his first marriage.

322. I think this warning refers implicitly (like General Douglas MacArthur's statement {FLG, 11} that Gandhi's ideas are vital to "the evolution of civilization, if it is to survive") to the invention and use of the atom bomb.

In 1961 he visited India — at the urging of Jayaprakash Narayan (who had by now become a Gandhian)³²³ — in order to address a seminar entitled "Paths to Economic Growth." He called Walt Rostow's influential theory of economic "take-off into self-sustained growth,"³²⁴ a recipe for ecologically unsustainable Westernization, and he said that a certain apathy (which he had observed) toward developing a different approach in India was:

"similar to the paralysis of the Aztecs when [in 1519] they met Cortès and his men sitting on the backs of horses and equipped with firearms.³²⁵ It was not the power of the Spaniards that destroyed the Aztec Empire but the disbelief of the Aztecs themselves." {WPS, 318-19}

Soon after returning to England he wrote, in a letter to the head of a Gandhian institute in India:

"Human life, it would seem, can come to a full flowering only when it ceases to be purely agricultural, that is when cities are founded in which an intense intellectual life can develop.... Both the best that human nature is capable of and the worst comes from the city.... Village life, therefore, it seems to me, must be closely connected with town life.... By 'town' I do not mean vast conurbations of the modern type." {WPS, 319}

He formulated now a slogan: "Find out what the people are doing and help them to do it better," revisited India in 1962, co-founded in England in 1964 — notwithstanding active opposition from eminent orthodox economists — an "Intermediate Technology Development Association," and in 1970 retired from his job with the Coal Board (and became president of the Soil Association, from which he had already in the late 1940s begun to learn about organic techniques applicable to his own garden).

Small is Beautiful was first published in 1973. It has four main parts: on the "modern world"; on the "third world"; on various types of resources (e.g. land, the minerals used in industry, nuclear energy, and "technology with a human face"); and on organization and ownership. To my mind some of the strongest writing is in the first chapter; for instance:

"Modern man does not experience himself as part of nature but as an outside force destined to dominate and conquer it.³²⁶ He even talks of a battle with nature, forgetting that if he won the battle, he would find himself on the losing side.... The illusion of un-

³²³. See pp. 33-34.

³²⁴. See REG (Rostow's book whereby, according to a leading historian {MDC, 197}, "the growth creed acquired its gospel"). Rostow was head of the USA State Department's Policy Planning Council.

³²⁵. The Aztecs felt overwhelmed by these novelties.

³²⁶. See p. 10.

limited powers, nourished by astonishing scientific and technological achievements, has produced the concurrent illusion of having solved the problem of production. The latter illusion is based on the failure to distinguish between income and capital where this distinction matters most. Every economist and businessman is familiar with the distinction, and applies it conscientiously and with considerable subtlety to all economic affairs — except where it really matters: namely, the irreplaceable capital which man has not made, but simply found, and without which he can do nothing.... Fossil fuels are merely a part of the 'natural capital' which we steadfastly insist as treating as expendable.... [for] if we squander the capital represented by living nature around us, we threaten life itself.... We have been living on the capital of living nature for some time, but at a fairly modest rate. It is only since the end of World War II that we have succeeded in increasing this rate to alarming proportions."

But whereas Kumarappa had avoided promoting this or that religion, *Small is Beautiful* celebrates Buddhism.³²⁷ But still its arguments are in many ways very like those set out by Kumarappa. Schumacher while writing it delivered a talk and published an article entitled "The Economics of Permanence." Gandhians in India who have read the article consider its title to have been derived from that of Kumarappa's *Economy of Permanence*, and indeed a citation from Kumarappa's book is included (albeit in the chapter on "Buddhist economics") in *Small is Beautiful*.³²⁸

³²⁷. Schumacher told fellow Western economists (see SSB, 38) that "Economics without Buddhism, i.e. without spiritual, human and ecological values, is like sex without love." It seems to me that this equating of Buddhism with such values was tantamount to denying that other religions can harbor them.

During his visit to Burma he had undergone in a Buddhist monastery some training in meditation. Earlier in the 1950s he had gone in for astrology and for the ideas of the Russian mystic, Gurdjieff. Later he converted to Roman Catholicism.

Schumacher's family circle included some quite distinguished men. One brother-in-law was the nuclear physicist in charge of Germany's program to invent the atom bomb. Another was the mayor of Hamburg after World War II. Schumacher's father was the professor of economics at the University of Berlin. Most of the family "worshipped evil gods" (according to Schumacher in 1945; see {WAP, 177}) and resented bitterly his criticisms of the Nazis. He himself had spent the war partly in an internment camp in England and partly as a farm worker in an English village where most of the local people vociferously hated him because of his nationality. The war had thus caused him some intense emotional strains.

³²⁸. SSB, 39: "Buddhist economics must be very different from the economics of modern materialism, since the Buddhist sees the essence of civilization not in a multiplication of wants but in the purification of human character. Character, at the same time, is formed primarily by a man's work. And work, properly conducted in conditions of human dignity and freedom, blesses those who do it and equally their products. The Indian philosopher and economist J. C. Kumarappa sums the matter up as follows:

Notwithstanding Schumacher's work in regard to intermediate technology, it seems to me that he was, like Kumarappa and Carson, more a prophet than a developer of open-system economic thought.

That historical development is too complex (and as yet too incomplete) to discuss here. For my purpose of setting a context in which to place Kumarappa historically, it will suffice to describe here a few basic concepts which have emerged since his day.

Some traditional habits of academic thinking in regard to market economics were (I suppose) bound to persist in the broader and deeper thinking required to understand open-system economics. This can be seen in the familiar theoretical division of ecological degradation into depletion and pollution. The division is based conveniently on a distinction in physics (and in chemistry) between "sources" and "sinks."³²⁹ In this regard, two key points for ecological economics are that (1) beyond the sources from which an economy gets its consumable energy and raw materials, and the sinks where it leaves its waste, are link-ups such that in an ecologically balanced economy, the flows out of the sinks are transformed and renew the sources; and (2) an unbalanced economy is sustainable until a vital source is depleted or a vital sink overflows. The consequences then will depend on what is really rather than metaphorically happening; but open-system economists regard the complex of sources and sinks — providing us with (among other things) feasible weather for living-conditions and

"If the nature of the work is properly appreciated and applied, it will stand in the same relation to the higher faculties as food is to the physical body. It nourishes and enlivens the higher man and urges him to produce the best he is capable of. It directs his free will along the proper course and disciplines the animal in him into progressive channels. It furnishes an excellent background for man to display his scale of values and develop his personality."

Schumacher's talk was delivered originally at a seminar in New Delhi entitled "The Relevance of Gandhi to Our Times." Its text appeared in various journals (e.g. *Resurgence*, III/1, 14-18, with an editorial introduction saying: "Dr. Schumacher is still, for the most part, ploughing a lone furrow among modern economists"), and then in *CNF*, but not in *STB*. (The editor of *Resurgence* today and founder of Schumacher College in England is a Jain monk, Satish Kumar; see *KND*, i and xvi.)

329. Examples of usage cited in *OED* include (from 1902) "In the case of [electric] current flow in plane sheets, we have to consider certain points called sources at which the current flows into the sheet, and certain points called sinks at which it leaves"; and (from 1977) "The main sink for hydroperoxy radicals in the troposphere appears ... to be reaction with nitrogen oxides."

agriculture — as "natural capital" (the Earth's "carrying capacity"), and regard an unbalanced economy as "spending" it to meet current wants. This analogy between natural resources and money has only limited validity, however, because bankruptcy in market economics can be survived.

Another way of reducing economic concepts to one dimension is to reckon in terms of energy. A leading historian of ecological economics regards this as essential to the field,³³⁰ but it seems to me not much more adequate than reckoning as if in terms of money, because one might reasonably consider each of these elements — money and energy — potentially limitless,³³¹ whereas our natural capital is limited in various ways. Yet economists do like to use broad, abstract indices (for "cost of living," "gross national product," etc.); so, an important theoretical contribution to ecological economics since Kumarappa's day has been the concept {*WRF*} of "ecological footprint": the total area of ecologically productive land and water (cropland, pasture, forest, marsh, river, sea, etc.) that would with prevailing technologies be required in order to provide on a continuous basis the energy and materials consumed by a given population, and to absorb its wastes.³³² Modern technology enables affluent consumers to make substantial use of sources and sinks so far away from them that they may neglect even an ominous indication of macro-ecological pollution if they are distracted culturally by hype, religion or, indeed, monetary analysis:

"As ecological services are a precondition for human life rather than a substitutable value, ...energy- and resource-accounting needs to be in biophysical units. Monetary analysis is misleading as it suggests substitutability,³³³ allows for the discounting of the future,³³⁴ and focuses on marginal rather than absolute values,³³⁵ to mention only a few limitations." {*WNC*, 376-77}³³⁶

The concept of ecological footprint illuminates nonetheless a salient aspect of international trade:

"There is a real possibility that trade can be a subtle mechanism by which ecological sustainability is preserved in some countries by means of importing bio-mass and sink-capacity from other countries, where the natural capital is instead gradually depleted....

330. See, in *MEP*, especially pp. 18-23.

331. *REL* is a mathematically sophisticated exercise in economic thinking based on the idea that the cosmos is *not* infinitely energetic.

332. A related concept is that of a country's "ecological shadow": "the environmental resources it draws from other countries and [from] the global commons" {*MWY*, 58-59}.

333. See pp. 121-22.

334. See pp. 75-76.

335. See p. 72.

336. See also *WEE* and *WRM*.

If the situation is recognized to be a zero-sum game,³³⁷ people may once again start to think in terms of *Lebensraum*. It may become more difficult to reach consensual... global solutions as the rich feel that they can only sustain their way of life by using external biocapacities and as the poor get a stronger feeling of being exploited. If the beliefs that ecological sustainability is best reached through economic growth in all countries are shattered, we enter into a world the ethical dilemmas of which will be much harder to face." {*ALE*, 121-22}

Such concern about zero-sum-game competition for ecological *Lebensraum* is a generalization of Kumarappa's concern about unhealthy competition for non-renewable material resources.³³⁸

Some female economists

Women began in the 20th century to write on economics. Already within Kumarappa's lifetime (but unbeknownst to him) Joan Robinson (1903-1983) became renowned among academic economists for her clear and penetrating explanations³³⁹ of mathematically elaborate economic models, showing how they fit economic reality (for instance in a book {*REC*} on competition among firms with some degree of monopolistic control over the market) or how they fail significantly to fit it (as when she deconstructed the concept of aggregated capital³⁴⁰). She was such an expert in Keynesian theory — it was she who defined macroeconomics as "theory of output as a whole" — that Cambridge University eventually gave her a higher academic rank than it had given to Keynes himself.³⁴¹

Jane Jacobs (born in 1916) has developed a set of arguments more obviously related to some of Kumarappa's ideas. She came to economics by way of an interest in architecture and city planning. Her first book (1961) had criticized slick and costly slum-clearance programs and had discussed

337. This refers to a world of "economic man" without the corollary of an "unseen hand."

338. See p. 41.

339. *REC* includes a set of such explanations.

340. See *RTC*. Among the concept's defenders, Samuelson eventually yielded a "final unconditional surrender" {*BCR*, 33}, but many orthodox economists still depend on it.

341. According to a businessmen's journal {*RBW*, 80}, "some of her views [were] what American businessmen talk about at board meetings" and she was, in the early days of the 'Nobel Prize' in economics, "high on everyone's list" to win it. The Bank's committee would not give its prize to a Marxist woman, but the American Economic Association accorded her "a thunderous ovation" {*RBW*, 82} when she lectured to it on "the evident bankruptcy of economic theory which has nothing to say on the questions that, to everyone except economists, appear to be most in need of an answer."

why, in great cities, "some neighborhoods die and ... [yet] others flourish" with their "mixed uses, dense populations, old buildings, small blocks, [and] decentralized ownership" {*JDL*, flap}. Her second book (1969) was entitled "The Economy of Cities"; her next one described various kinds of economic regions and is worth summarizing here in some detail. Its main thesis is that potentially endless development of the market economy is generated by cities finding, again and again, new ways to replace imports:

"Economic life develops by grace of innovating; it expands by grace of import-replacing. These two master economic processes are closely related, both being functions of city economies. {*JCW*, 39}

"Any settlement that becomes good at import-replacing becomes a city.... [However, it] does not, upon replacing former imports, import less than it otherwise would, but shifts to ... new and different imports." {*JCW*, 40-42}

"The expansion that derives from import-replacing consists ...of... five forms of growth: [1] abruptly enlarged city markets for new and different imports consisting largely of rural goods and of innovations being produced in other cities; [2] abruptly increased numbers and kinds of jobs in the import-replacing city; [3] increased transplants of city work into non-urban locations as older enterprises are crowded out; [4] new uses for technology, particularly to increase rural production and productivity; and [5] growth of city capital.... These five great forces exert far-reaching effects outside of import-replacing cities as well as within them." {*JCW*, 42-43}

According to Jacobs, lasting benefits ensue only where all five of these "forces" are present:

"In city regions [i.e. nearby hinterlands] some people leave for city jobs while technology improves the rural productivity and yields of others.... But in other types of regions, economic forces from cities seldom dovetail that neatly." {*JCW*, 86}

She describes how regions which mainly supply raw materials to cities (in the same nation or in another one) suffer in the long run, because:

"their production for others ... overwhelmingly outweighs production for themselves. ...[They] are often said to have colonial economies. The term embodies this piece of truth: imperial powers have typically shaped conquered territories into supply regions. ...Supply economies are not efficient.... Their specialities are sometimes ... efficiently produced. But ... an economy that contains few different sorts of niches for people's differing skills, interests and imaginations is not efficient. An economy that is unresourceful and unadaptable is not efficient. An economy that can fill few of the needs of its own people and producers is not efficient." {*JCW*, 63, 68, 71}

She notes that in the late 1930s in the southeastern parts of the USA:

"A few unbalanced strands of city energy — city technology accompanied by city-derived capital — reached into distant regions and distorted them gravely. Much of the increased productivity and wealth attendant on this agricultural revolution has proved to be illusory from a national viewpoint. The costs of idleness and unproductivity of

displaced people, along with the accompanying poverty, demoralization, violence, drug addiction and crime, are incalculable but they are enormous." {JCW, 85}

And then, in various economically "backward" countries in the 1960s,

"...the Green Revolution ... displaced and dislocated people ... and all too seldom... [were] alternate productive city livelihoods ... available to them.

[So,] the World Bank ... [began] in 1968 ... to concentrate heavily on improvements to rural life with the object of keeping rural people in their villages instead of displacing them. This was the approach also advocated by ... Gunnar Myrdal.... [Focussing on] health, education, nutrition, housing and reduced birth rates ... the bank turned to making low-interest and no-interest loans to poor countries for these purposes.... These basic necessities were supposed to pay off in development and the ability of development to expand wealth. That last notion ... theoretically justified the bank's mission as a development agency and lender, not a philanthropy.

"In 1968 ... the bank's outstanding loans totaled \$1 billion. By 1980 ... \$11.5 billion.... Commercial banks made loans of \$90 billion during the same period to augment the financing required for the World Bank's projects and programs.... In the event the loans are not repayable." {JCW, 89-91}

She admits that:

"Marshall Plan aid from America after World War II helped put [West] Europeans and their enterprises back on their feet after the ruin wrought by bombing, tanks and artillery" {JCW, 7}

—but points out that:

"The healing of organisms ... is not at all the same as the metamorphosis of organisms, the conversion of them into something different." {JCW, 7}

After detailing a number of related arguments in the following vein:

"[Unless there is] access to ... jobs in adaptable, vigorous import-replacing cities, technology arbitrarily arriving [in the countryside] from distant cities is not a blessing but a curse." {JCW, 92}

"A developing economy is not created in remotely the same way as an army, nor ... sustained in the same way.... What happens when the transplanted factories depart or fail or grow obsolete, what do they leave behind in their company towns?" {JCW, 104}

"Loans, grants and subsidies sent into regions lacking vigorous cities can shape inert, unbalanced or permanently dependent regions, but are useless for creating self-generating economies." {JCW, 110}

"[Unless backward cities] trade most heavily with other backward cities..., the gulf between what they import [from technologically advanced cities] and what they can replace with their own production is too great to be bridged." {JCW, 139-141}

"Inappropriate though much theoretically appropriate rural village technology has proved to be, much ingenuity is expended in its cause. Inventions for this purpose have a romantic appeal, it seems, for the same people who romanticize subsistence farming. But the ingenuity spent on such devices is misdirected because it puts the cart before

the horse: that is, it is directed toward improvements in rural productivity which inherently cannot be feasible economically without prior city development." {JCW, 151}

—she concludes that:

"successful economic development has to be open-ended rather than goal-oriented, and has to make itself up expeditiously and empirically as it goes along. For one thing, unforeseeable problems arise. The people who developed agriculture couldn't foresee soil depletion. The people who developed the automobile couldn't foresee acid rain.... Development [is best seen as] an improvisational drift into unprecedented kinds of work that carry unprecedented problems, then drifting into unprecedented solutions, which carry further unprecedented work.... 'Industrial strategies' to meet 'targets' using 'resolute purpose,' 'long-range planning' and 'determined will' express a military kind of thinking.... Economic life can be [thus] mobilized ... when it is directed toward warfare, but not when it directs itself to development and expansion....

"The more niches that are filled in a given natural ecology, other things being equal, the more efficiently it uses the energy it has at its disposal, and the richer it is in life and means of supporting life. Just so with our own economies." {JCW, 221-223}

Thus while dismissing implicitly Gandhi's ideals of self-sustaining villages³⁴² and inherited vocations,³⁴³ she amplifies Kumarappa's criticisms of the five-year plans and the dependency they entailed for India.³⁴⁴ She also sets out a related part of the small-is-beautiful argument:

"These are times of rapid change when we need to welcome innovative, better ways of doing things.... [And yet] all central planning is at odds with multiple and diverse experimenting. To be sure, small bureaucracies can be as brain-dead as big ones, but at least if they are multiple, when one says no or just doesn't get it, the old saying applies: not all the eggs are in that basket." {SSB, 206}

Jacobs is a normative economist, and one of her books {JDM} is a dialogue about the "moral foundations of commerce and politics." But her work is, unlike Kumarappa's, mostly devoid of statistics, and her concept of economic growth confuses aggregate and per-capita increases. If her arguments had been available to Kumarappa, he might — if not persuaded by them — have said that her distinction in a more recent book {JNE, 37} between qualitative economic "development" and quantitative "expansion" is at odds with her basic delight in the premiss that any settlement which becomes good at import-replacing becomes a city.

342. Myrdal had said that "In all South Asian countries not only has small-scale industry sought out the big cities but various government support schemes have been adjusted to this trend, often in the face of clear programmatic declarations in favor of dispersion and rural industrialization." {MAP, 1221}

343. See p. 91.

344. See pp. 44 (the second citation) and 54-55.

One would search in vain for feminist rhetoric in the writings of Robinson or Jacobs (although their fresh sense of economic realities may have been due in part to their being women in a traditionally "male" field). More recently, however, there has been a worldwide surge of explicitly feminist writing on economics.³⁴⁵ Without trying to survey it — which would anyway be beyond my capacities, as I can read only five languages — I will describe two North American examples from the 1980s and '90s that seem to me fairly representative of the Marxist and Gandhian traditions.

Jean Grossholtz's *Forging Capitalist Patriarchy: The Economic and Social Transformation of Feudal Sri Lanka and Its Impact on Women* (1984) is "a study of the interlinking [in Sri Lanka] of colonialism, capitalism, and patriarchy." It is "Marxist in its assumptions about the nature of capitalism and imperialism," and yet "goes beyond Marxism in that it seeks to understand the relation between capitalism and patriarchy" (GFC, 3-5). It deals with two kinds of questions:

[1] "What is the difference between women's lives under feudal patriarchy and capitalist patriarchy? How are the relations of reproduction, upon which gender is based, related to the relations of production upon which the economic system is based?"

[2] "Why is there so little fundamental change in former colonies? Why is there such gross inequality between the industrialized states and the former colonies?" (GFC, 3)

Kumarappa's warnings in the 1950s about too little fundamental socio-economic change in India were prophetic of some of the more recent developments described by Grossholtz. His examples of the enterprising wet-nurse and the predatory corporation promoting synthetic milk (no matter how it might harm babies and deprive their mothers of "dignity of work")³⁴⁶ can be related to the difference between women's lives under feudal vs capitalist patriarchy. But he never discussed relations of reproduction, and never wrote anything like the following by Grossholtz:

"The distribution [between men and women] of power under the patriarchal system was harnessed to the accumulation of capital. Plantations made use of women as a means of pacifying the male labor force, first as sexual servants and later as providers of household services. When a settled labor force was required, women were assigned the task of reproducing, nurturing and caring for that work force.... As tea and rubber plantations were established, women were ... recruited directly to the labor force ... but ... were paid less than men. In this way the relations of power within the family were

extended outside the family and utilized to the advantage of capital accumulation.... The decline of Buddhism and the spread of Christianity ...[aggravated]... this process of devaluation of women." (GFC, 133)

According to Barbara Brandt's *Whole Life Economics* (1995),³⁴⁷ capitalism suffers in its practice from a certain kind of addiction ("the inability to set limits ... to our economic activities") and suffers in its theory from a certain blindness (as "many [economic] activities essential for human well-being are not officially considered part of the economy"). Brandt surveys various current constructive responses in North America, including new kinds of enterprise, new kinds of local money, and new roles for men and women. She describes the work (and gives the addresses) of a number of organizations in North America — such as "Businesses for Social Responsibility," "Center for Neighborhood Technology," and so on through the alphabet to "Voluntary Simplicity Organization" and "Women's Environment and Development Organization"— which are largely neo-Gandhian in that their work embodies ideals of non-exploitive economic relations and non-violent change and is based on the concept of civilization as consisting not in the endless multiplication but in the "deliberate ... restriction of wants" to a reasonable level.

Two ideas characteristic of this book are that:

(1) In capitalism, businesses "often die horrible deaths, blamed for incompetence and leaving bankrupt creditors and unemployed workers in their wake." When prominent corporations begin to fail, the government postpones the day of reckoning by using tax revenues to prop them up. But according to a "postmodern paradigm" of whole-life economy, "there is nothing shameful about a company that has fulfilled its mission and faded out of existence," and to act accordingly would enable "each enterprise to prepare, with the support of its employees, suppliers, customers and the surrounding community, to meet its demise in the most socially and economically beneficial manner":

"The United States already has a model that recognizes the life cycle of organizations ...in... the non-profit sector. Nonprofits are not expected to constantly expand.... If at some point in its existence a nonprofit decides it has fulfilled its mission, this is con-

345. I am not referring here to "ecofeminism" (which is more about ecology than about ecological economics; for a succinct introduction see MRC, 106-07).

346. See p. 45.

347. Not long after this book was published, Amartya Sen told Brandt: "I am delighted to learn that there is a possibility that *Whole Life Economics* may be republished in India.... I ... hope that the [re]publication will take place."

sidered an admission of success, not failure. It has solved the problem, or met the need for which it was organized, and can end its operations. Any remaining assets are legally required to be passed on to some other nonprofit." {*BWL*, 201}

(2) People who are "free to develop economic activities under their own direction" without catering to the demands of "a hierarchically superior group or of an addiction-driven system" will find that their actions meet the following types of needs {*BWL*, 181-84}:

- "ongoing survival needs";
- "ongoing needs for amenities" [hygiene, games and clubs,³⁴⁸ means of communication, artistic expression,³⁴⁹ etc.]
- "cyclical needs for care" [in childhood, illness, bereavement and senility]
- "occasional needs for luxuries" [vacations, ice cream...: such things retaining their charm only if one has them infrequently]³⁵⁰
- "the ongoing need to replenish the sources that support and sustain us" [e.g. gardening, caring for other people, recycling properly].

This seems to me far better than Gandhi's and Kumarappa's simple distinction between needs and wants. Yet upon first reading Kumarappa's *Economy of Permanence* (after her own book was published) Brandt remarked, "Now I know where my ideas came from."³⁵¹

348. See pp. 44-45.

349. See note 65.

350. See pp 25 and 97.

351. Interview, 1997. The linkage was through Schumacher and a "futurist," Hazel Henderson, one of whose books (*HPP*) gave Brandt the idea of writing her own. Henderson's first book (*HCA*) has a foreword written by Schumacher in the last year of his life and saying he found her work "illuminating like a flash of lightening." Her next book, dedicated to her daughter and to "all the world's people ... the servants of Gaia and the planetary citizens of the dawning Solar Age," says that:

"the only legitimate role for economics is that of, as far as possible, quantifying [the] social costs ... of treating polluted water, cleaning and repairing pollution damage, collecting throwaway containers, building new community services for incoming factories, police, schools, access roads, fire-protection, sanitation services, etc.... The external-costs approach is built on K. W. Kapp's *Social Costs of Private Enterprise* (1950)." {*HPS*, 232}

Henderson's style puts me off, but I do find her work stimulating and rich in references to other sources of information.

REFLECTIONS

Here I will share with Gandhians and economists alike my opinions about Kumarappa and his relation to the modern history of Western economic thought.

Kumarappa as a Gandhian

Gandhians rightly appreciate his honesty and his devotion to improving the lot of the poor rather than to gaining luxury or power for himself. But his moral harshness was very counterproductive.³⁵¹ In 1953 his official biographer said:

"He believes truth needs no sugar-coating ... and should be presented in all its nakedness. He is unpopular on that account, but then he does not court popularity." {*VKQ*, 99}

According to an eminent Gandhian³⁵² nearly forty years later:

"We need to get behind the other person's defences and overcome his resistance ... instead of wishing to prove the truth of our assertion and force it down his throat. Perhaps it was the lack of this quality which made Kumarappa's 'economics of peace' so militant." {*SNK*, 284}

His attitude toward the cultural trappings of British imperialism was often chauvenistic (notwithstanding his ardent Christianity) and tended thus to discredit his arguments against economic imperialism. And when he criticised Nehru's policies he became virtually a Cassandra³⁵³ with, alas, such an aura of moral smugness that Chester Bowles could get away with calling him "a foolish man,"³⁵⁴ Gunnar Myrdal would ignore him,³⁵⁵ and even Schumacher would cite him only once in *Small is Beautiful*.³⁵⁶

As AIVIA administrator

In addition to being undiplomatic, Kumarappa never implemented Gandhi's request {*GCW* LXXXI, 146} to master personally "at least one craft,... acquire a workable knowledge of Hindustani ...[and] have your letterhead

351. Several times in the 1930s and early '40s Gandhi did his best to repair the damage in particular instances. See for instance *GCW* XLIV, 178 and 378; LXIV, 373; LXV, 50; LXX, 77 and 379; LXXIV, 356; and LXX, 79 (with Gandhi's remarks to Nehru: "You have made more than ample amends about Kumarappa.... Yes, we have very few workers like him"). See also *VRE*, 230-234.

352. This was Sushila Nayar, who in 1939 became Gandhi's personal physician (her brother, Pyarelal, had since 1920 been working closely with him as a secretary) and who served in the national cabinet in the 1960s.

353. See pp. 53-57.

354. See note. 136.

355. See p. 127.

356. See pp. 133-34.

in Nagari and Urdu scripts" (which are more familiar in North India than Western letters).³⁵⁷ A Westerner who worked at the AIVIA headquarters in the mid-1930s told me (65 years later) that Kumarappa had not thought clearly enough about criteria for distinguishing between acceptable and unacceptable kinds of mechanization, though he did sometimes discuss this issue with his AIVIA colleagues.³⁵⁸

In Gandhi's opinion — published by Kumarappa himself when constructive work was being resumed in 1945 after their wartime imprisonments — the AIVIA did not "show the results it might have" (GCW LXXXI, 143-44). To assess its achievements is beyond my scope,³⁵⁹ but even if I knew that they were just as small (relative to India's vast size) as they were unspectacular, I might still wonder how much to blame Kumarappa, how much the inadequacy of the resources at his disposal,³⁶⁰ and how much the fact that he was trying to achieve, during a period of great political turmoil, a radical economic ideal that even today wants further maturation.

To evaluate his ideas about economics, however, is different from assessing his effectiveness in politics or in the AIVIA.

His knowledge of the economy

I think Kumarappa's opinion that agriculture³⁶¹ remains always the most important single part of an economy was just as valuable as it was unusual among economists of his day (and of today), and that the three economic surveys which he designed and led in the 1930s and early '40s made him better informed than anyone else about the rural economy in India in those days (and maybe since). No doubt the value of his knowledge was, as with

357. Gandhi told all his co-workers, "Our love of the English language in preference to our own mother tongue[s] has caused a deep chasm between the ... politically minded classes and the masses." (GCP, 16)

358. Interviews with Herbert Fischer, 1998.

359. From an interview in 2000 with Vijay Chandra Prakash at Maganwadi (formerly the head office of the AIVIA), I learned that at that time the current research projects there were as follows: (1) irrigation with a minimum of water by using, for each plant, a circular emitter-tube of porous clay; (2) making agricultural insecticides of liquified leaves of certain plants which naturally contain insecticide substances; (3) seven types of organic fertilizers; (4) biogas; (5) low-cost housing; (6) a ceramic thermos-type refrigerator; (7) hand-made paper; (8) cultivation of honey.

360. MSI discusses the problem ca. 1960; www.GujaratVidyapith.org and JJD (see for instance PID) provide more recent information of this kind.

361. I take this term to include the (as yet unusual) cultivation of sea-vegetables.

most economists, diminished by too much ideology. But the knowledge itself was based on an abundance of systematic first-hand and nearly first-hand observations. Most economists are far less knowledgeable about economic realities. Nothing like the down-to-earth savvy reflected in the table shown on p. 46 is hinted at, for instance, in the World Bank's 300-page food-policy analysis published in 1983; instead, the Bank's economists offer page after page of relatively opaque discourse in the following vein:

"The body uses nutrients to provide energy for work and growth and the raw materials for healthy metabolism and body development. Individual food commodities carry a variety of nutrients, and often nutrient analysis is a helpful additional step in consumption analysis.

NUTRIENT ANALYSIS. Nutritional status depends heavily on nutrient intake. While such nutrients come from food, the body is more or less indifferent to the source of specific nutrients, whether calories, amino acids, vitamins, or minerals. Carrots and papaya both provide vitamin A; the eye can hardly tell the difference at the level of blood chemistry. Individual commodity analysis is extremely important to understanding actual consumer decision-making, for people buy and consume foods, not nutrients. Most foods, however, contain many different nutrients, and not all important nutrients are completely supplied by normal amounts of one particular food. Hence, an important distinction exists between food commodity analysis and nutrient analysis, and some understanding of overall changes in nutrient intake is necessary to complement the individual commodity intakes.

Separate analysis of individual nutrients (such as calories, protein, iron, calcium, and vitamin A) can be made as if they were commodities. With information from nutritional scientists and dietitians the quantity of food consumed can be converted into nutrients actually available to the body. Few such consumption analyses have been made, especially for disaggregated income classes, and all have focused on income effects." (WBF, 62)

His view of mathematically formulated economic theory

Modern academic economic theory has tended to become gradually more sophisticated mathematically; so, the fact that Kumarappa had (like his American professors³⁶²) little use for mathematics beyond arithmetic tends to limit his stature as an academically respectable theorist. But he thought that British economic theory had *already* "gone to seed in mathematical formulae." In defence of that opinion, one could say it shows implicitly his grasp of the fact, still often overlooked in the mathematically formulated theories of orthodox economists, that a vast amount of economic activity — including, for instance, most of what is done by the harder-

362. Paul Samuelson once recalled: "When I began the study of economics back in 1932 [in the USA],... economics was literary economics: [only] a few original spirits... used mathematical symbols." (SCP, V, 797)

working, female half of India's population — is not paid for and thus lies beyond the reach of the economists' formulations in terms of money. Kumarappa knew too much about the economy of India to rely on models based exclusively on such formulations.³⁶³ That is why he devised (see pp. 51-52) an alternative kind of economic reckoning.

The academics' penchant for thinking in monetary terms has been due only in part to the fact that most students and other clients wishing to be taught about economics — indeed so many that they make "economics" a lucrative profession — are motivated mainly by greed. Some other incentives are (a) the intellectual convenience of reducing things to one kind of measure, and (b) the fact that to use formulations which look like those used in physics is a way to make an economist look scientific like a physicist.³⁶⁴ There is a link, however, between this latter point and the pressure of the clients' greed. In scientific medical practice the patient's condition is described in terms of several different kinds of unit of measure (for age, weight, temperature, pulse, blood-pressure, cell-counts etc.); and surely an economy is comparable in complexity to a human individual; but one reason why a lot of economists would rather seem to be like a physicist than like a physician is that in order to exclude findings which would turn away a greed-motivated client, they lean to the idea that a discipline (such as medicine) with inherent ethical concerns is less scientific than one (such as physics) without them. In this light it seems to me that since the mathematically formulated economic theory known to Kumarappa used only one kind of unit of measure, focusing as it did on market equilibria, his low opinion of it was a corollary of his commitment to normative economic thinking.³⁶⁵

363. Robbins admitted (*RLD*, 344) that to restrict the scope of economic thinking to monetary aspects limits it to an institutional context (see note 202). Some more recent neo-orthodox economists also pay lip-service to the importance of institutions: see *PEH*.

364. But whereas physicists use technical terms with standard definitions, there is ideological spin in economists' uses of terms like "economic man" and "Say's Law."

A pertinent phrase, "physics envy," has been used (in another context) by a distinguished biologist, Lynn Margulis (whose gift for sharp phrases is shown also by her metaphor, "Gaia is a tough bitch"; see *BTC*, VII).

365. He drew analogies between his profession and medicine (not physics). He called his study of the rural economy in central India a diagnostic report for the purpose of "saving the patient's life by a suitable prescription" (see p. 37), and his *Economy of Permanence* uses a simile between the dietary value of roughage and the value to the individual of physical work as one of "the constituent parts of work [that] are essential to ... let it serve its ... purpose [i.e. function] ordained by nature" (see p. 45).

His institutional and ethical perspectives

Kumarappa supported Gandhi's precept that each village in India ought to be as self-sufficient economically as feasible.³⁶⁶ He also warned, as an economist, against ignoring the "useful functions" performed by certain traditional Indian institutions, and against assuming that people in India must behave economically "in the same way as do Westerners."³⁶⁷ He may thus have been the first to adapt some ideas of Western institutional economics to a non-Western context.

In regard to ethics, it seems to me that in the 1930s his engagement in the struggle for Indian independence put him into an unfortunately dualistic frame of mind, along the following lines:

<u>evil</u>	<u>good</u>
"wolf-pack societies"	"sheep-herd societies"
carnivores	vegetarians
British imperialists	Indian subjects
industrialists	peasants and artisans

But then during his last jail term he found a way to transcend this dualistic approach³⁶⁸ when he devised his theoretical scale of five types of economic activity distinguished by underlying ethical attitudes (of which more than one could, he said, co-exist in the same individual): (1) predatory (destroying one's sources of benefit); (2) parasitical (taking benefits by exercising rights, but neglecting duties and therefore failing to make a positive contribution); (3) enterprising (whereby the individual "economic man" is economically creative and may have a sense of enlightened self-interest precluding predatory and parasitic behavior); (4) socialist (characterized by self-submission to the will of the group); (5) service-oriented and thus conducive to an "economy of permanence." I see here an institutionalist influence, inasmuch as the "economic man" concept — itself an institution — is associated with only the first three of the five types, and Kumarappa said that there has been a certain broad historical trend to move up the scale. Whatever modifications the theory may need, it allows for the fact (discussed in *WPE*) that the more one is taught to behave like

366. See pp. 108-09.

367. See pp. 31, 27 and 79-80.

368. Some intellectual oversights due to dualistic thinking are still apparent in the second and third lines of the diagram on p. 43, where creativity and dutifulness are associated exclusively with permanence. (During World War II, napalm was invented dutifully and by means of a sustained effort of intellectual creativity.)

"economic man," the more one does so, and it provides a basis for nuanced evaluations in normative thinking about economics since it prompts one, beyond considering whether something is fair or unfair, to see it in historical perspective and with neither moral indifference nor the ideologue's drift to brutal solutions.

I think the approach could be applied to the characteristically Gandhian moral and political issues that are brought out in the following kind of historical analysis (this passage is from an American historian's account of "the shape of European history"):

"Capacity to concentrate enough grain to support scores of thousands of city folk who did not raise their own food was [in ancient times] an important prerequisite for developing the kinds of cultures in the Mediterranean zone that were capable of commanding admiration and inspiring imitation elsewhere in Europe. This required not only ships and sailors, but a hinterland whose inhabitants were either compelled or induced to produce and part with a surplus of grain and other commodities. This prerequisite for all modern civilizations was achieved sometimes by force, sometimes by offering goods produced in civilized workshops in exchange.... Local magnates usually collected small surpluses locally, playing the role of the landlord, and then exchanged part of what they had thus accumulated for luxury goods brought from afar. Such civilized luxuries were offered for sale by seafaring merchants whose numerical weakness *vis à vis* local populations made forcible seizure of desired local commodities — grain, metals, lumber — impracticable. This sort of symbiosis between a local landlord class and civilized merchants and traders was necessary to allow smooth concentration of food and other raw materials at the center. Local landlords, in turn, glimpsing the refinements and luxuries of civilized life, became barbarians par excellence: aware of what was possible and aware, also, of their inability to rival locally the products and skills of full-blown urban civilization." {*MSH*, 50-51}

His place in the history of "small is beautiful"

Fortified psychologically by his mastery of accounting, Kumarappa came up with a provocative and still today unorthodox theory³⁶⁹ that an inevitable unwieldiness of big factories renders them far less efficient macro-

369. A recent version is set out in *BLE*. The following excerpts from a poem of 1947 by Robert Frost provide an example of the ridicule to which the idea has often been subjected:

Mrs. Someone's been to Asia.
What she brought back would amaze ye.
...
Arguments too stale to mention
'Gainst American invention —
Most of all the mass production
Destined to prove our destruction.

economically, because of what Pigou termed "external costs," than the profits and the products' market prices would suggest.³⁷⁰ One could criticize this theory by saying that high "external" costs are not inevitable in capitalism and that Kumarappa confused with normal peacetime conditions the war economy in the midst of which he was trained as an accountant. A reply in his defence might say that such criticism misses the significance of his first-hand observation that the British regarded war as a "necessary part of a well-ordered society"³⁷¹ and finesses the issues of ruthlessly exploitive globalization and ecologically unsustainable international trade which make Gandhian economics interesting today.³⁷² But I think that even if this defence of Kumarappa's theory may be good as far as it goes (and I should mention that Professor Datta goes farther on pp. ix-x of his wise foreword to this book), it is no more solid than the criticism it refutes; the criticism calls for substantial rebuttal and not just common-sense assertions; a comprehensive scientific analysis of ways in which evidence supports Kumarappa's theory would yield a far stronger version of it.

Such analysis would take account of various kinds of "external" damage to humankind that were not yet, in Kumarappa's day, sufficiently evident for him to emphasize them. It would require, however, a more sophisticated

What are telephones, skyscrapers,
Safety razors, Sunday papers
But the silliest evasion
Of the truths we owe an Asian?

370. On Pigou see pp. 80-81. Robinson (see p. 136) reached the following conclusions in her last book (1971):

"After fifty years, Pigou's emphasis on the difference between the real cost to society of producing saleable goods and the money cost to profit-seeking firms is beginning to be appreciated....

"National economic success is identified with statistical GNP [Gross National Product]. No questions are asked about the content of production. The success of modern capitalism for the last twenty-five years has been closely bound up with the armaments race and the trade in weapons (not to mention wars when they are used); it has not succeeded in eliminating poverty... [and] now we are told that it is in the course of making the planet uninhabitable even in peacetime.

"It should be the duty of economists to do their best to enlighten the public about the economic aspects of these menacing problems. They are impeded by a theoretical scheme which (with whatever reservations and exceptions) represents the capitalist world as a kibbutz operated in a perfectly enlightened manner to maximize the welfare of all its members." {*REQ*, 140, 143-44}

371. See p. 34.

372. See pp. 34 and 134-35, and *BEI*. This is not to say that all international trade is ecologically unsustainable and all globalization ruthlessly exploitive.

understanding of damage than orthodox economists would be inclined to tolerate. It is due in part to their prestige in the USA that, for instance:

"When calculating the 'acceptable' levels of carcinogenic pesticides in food, the Environmental Protection Agency treats each pesticide as if it were the only one to which people are exposed. This, of course, is far from the truth.... We must ... be concerned with the addition to our food of *many* chemicals, combined, and their sum effect upon people throughout the population." {SDP, Foreword and 183}³⁷³

Yet it is already, I think, clear that one lesson to be learned from the economic mistakes of the Soviet Russia, of China under Mao Tse-Dung, of the World Bank under Robert McNamara, and indeed of any company that markets successfully a harmful product, is that in economic experimentation, big is dangerous because the mishaps will, however noble may be some of the motivation to which they are due, have big bad effects. And are not most big-scale economic programs perforce experimental? Thus even if Kumarappa's attitude toward factories was reactionary, there is wisdom in the small-is-beautiful theory that he invented, inasmuch as small-scale ventures enable trial and error to proceed with less devastating overall effect.³⁷⁴

A positive aspect of the small-is-beautiful theory is its precept that an economy characterized by individually "tailor-made" goods is more bene-

373. The foreword is by a Senior Science Advisor to the Environmental Protection Agency and includes a footnote: "The foreword by William Marcus is written in his capacity as a private citizen. Anything he has written is his own opinion and does not necessarily reflect the opinions and policies of his employer, the United States Environmental Protection Agency."

Such dangers will affect mostly future generations. AAP is an attempt at a survey (700+ pp.) for clinical use in regard to children currently (in 1999) in the USA. According to the American Academy of Pediatrics Center for Child Health Research, that survey seriously underestimates some of the damages. See also GPE.

Another kind of external cost which orthodox economists never take into account is sampled very briefly by the following tabulation {NCS, 54} of infants so badly injured by shaken-baby syndrome that they were taken to Children's Hospital in Norfolk VA between 1991 and 2001; each year coinciding with the return of military personnel to Norfolk from deployment abroad is indicated by an asterisk: 1991: 0; *1992: 2; *1993: 4; 1994: 2; *1995: 3; 1996: 0; *1997: 3; 1998: 1; 1999: 1; *2000: 3; *2001: 4.

374. See for instance the second citation on p. 139. Kumarappa's theory seems to me superior to von Hayek's concept of the "fatal conceit" (Hayek's term for the belief that some kind of governmental economic policy other than *laissez faire* can be beneficial). Hayek overlooked (a) the devastations caused by some big corporations and (b) the remarkable success of some small welfare states.

ficial spiritually, to producers and consumers alike, than a mass-production economy. I think that some rich people do find great satisfaction in ordering and using such goods (art, architecture, high-fashion clothes, high-cuisine food, personal services of various kinds, etc.) and some of the providers find great satisfaction in their work. To what extent all sorts of people in India's villages could in the modern world generate a cornucopia of such satisfactions locally (as Kumarappa hoped) is another matter. Market competition comes from a host of mass-produced goods; these have included blessings (e.g. nice soap, bright lighting, e-mail) as well as products of very equivocal value (e.g. nicely packaged unhealthy foods); and the experience of the AIVIA shows that at least in certain historical circumstances, decentralized production hardly ensures that goods will be of good quality.³⁷⁵ So, I accept J. P. Narayan's argument³⁷⁶ that centralization vs decentralization (the one to the exclusion of the other) should not be an issue in normative economic thinking. The economist should instead describe feasible forms of "mixed" (in this regard) economy, and the argument that decentralization means "turning back the forces of society"³⁷⁶ should yield accordingly to a detailed consideration of how best to combine centralization and decentralization. A sensible economist called in 1990 for "a multi-level one-world economy":

"Instead of systematically creating and extending dependency, it must systematically foster self-reliance and the capacity for self-development.... [S]elf-development includes the capacity for coöperative self-reliance." {RFW, 13}

Another, equally sensible economist has more recently said:

"Two sectors of the economy have to stay side by side. One of these will have to be oriented towards the world market, hospitable to foreign capital.... The other sector will have the character of a neighborhood economy, aiming to provide as much productive work for the local people as possible, basically oriented towards the satisfaction of the needs of the local community rather than distant markets, bent on devising new technology suited to its chosen aims and striving to achieve a 'communitarian' character.... This is not a social order which can be imposed from above, it has to be built up from the base." {DPH, 66}

and:

"The dominant economic order of the present epoch is going to stay in the foreseeable future and a political strategy which believes in destroying it first³⁷⁷ as a precondition for social reconstruction is a wrong strategy. A critique of the existing order must be

375. Kumarappa's sense of such problems is apparent from his remarks referred to in the middle of p. 5 (and from his elegant hut; see p. 32).

376. See p. 33.

377. Kumarappa did not advocate such politics. Rather, he criticized an imbalance in

combined with a positive program for reconstruction from the base. This is a duality with a new function, its purpose being not the perpetuation of an old order but building for a new future where the local and the global will arrive at a historic reconciliation." (DPD: my source also for the preceding two citations)

Instead of "local and global" I would say "local as well as regional and global," in order to suggest gradual changes and a flexible approach taking advantage of the different levels of loyalty which promote ethical behavior.

His place in the history of ecological economics

Some quite substantial ecological studies predated Kumarappa's work, and certain kinds of ecological degradation were noted by various writers before him; but still it may be correct to regard him as having invented, in *Economy of Permanence*, the concept of a sustainable economy (which is, of course, distinct from that of "sustainable development").

As a humanist worried about current and pending macro-ecological risks, I sense tragedy for humankind in the fact that the 20th-century economists who pointed to physics as the proper model for scientific economics³⁷⁸ declined for the most part, notwithstanding their mathematical abilities, to help the discipline become substantially scientific by drawing upon physics, chemistry, biology, meteorology, epidemiology etc. and developing open-system models.

India's first two Five Year Plans between the amounts of tax revenues spent on building up the two sectors.

378. Samuelson would often suggest, near the beginning of an article or book, that he and certain other economists were scientific like physicists. To praise colleagues (see for instance *SCP*, IV, 3 and V, 853) he would cite the couplet, "Nature and Nature's laws lay hid in night. / God said, 'Let Newton be!' and all was light." The first paragraph of one of his articles (*SCP*, III, 18) includes the following: "Newton and Leibniz both discovered the calculus because that subject was then in the air. Similarly, 1933, the year of [Edward Chamberlain's] *The Theory of Monopolistic Competition* and of [Robinson's] *The Economics of Imperfect Competition*, followed a decade of intense discussion concerning the nature of competition." Samuelson in a late edition (1983) of his textbook (*SIA*) boasted that the first edition had "finally achieved for economics a synthesis of Cournot's Newtonian calculus method of maximizing with Walras's equations of general equilibrium. Certain problems were settled for all time." (*SCP*, V, 848) His speech accepting a Nobel Memorial Prize includes remarks in the following vein: "One of the pleasing things about science is that we do all climb towards the heavens on the shoulders of our predecessors. Economics like physics has its heros...." (*SCP*, III, 7) See apropos the wry comments in *PEH*, 25-26.

It is because of this concern that I appreciate Kumarappa's stance on ecological issues, and have shown (in Sections 1 and 4) that he was an historically pivotal figure between the earlier conservation movement and the gradual emergence, after his death in 1960, of properly elaborated "ecological economics." I understand the sentiment of a disciple of his who wrote in 1992:

"He foresaw even half a century back what would happen to the world in the form of deadly pollution now decried by ... scientists of repute. Let us therefore study Kumarappa deeply ... and make this Earth free from ... suicidal policies." (*GM* XIV, 326)

I think that a "hands-off" ideology of humanity's relation to the rest of Nature would be inadequate in the face of the eventual interactive effects of unprecedented levels of food poisoning,³⁷⁹ ever nastier bacteria and viruses,³⁸⁰ ever more destructive weather, receding water-tables, depleted soils and seas, polluted air and water,³⁸¹ noxious radiation in war and in peace, etc. So I think Kumarappa's vision of promoting the "coöperation and coördination of Nature's units"³⁸² will prove an essential complement to the "hands-off" concept. Even a doctor who is an expert in knowing how to let the organism cure itself must sometimes intervene.³⁸³

We have seen how Kumarappa, while complaining that "little attention is being paid to renewing the fertility of the soil," advocated the careful use of artificial fertilizers and tried to alert the Indian government to their "indiscriminate use," to the need for properly functioning irrigation tanks, and to a dangerous imbalance in the government's anxiety about "the revenue production of forests rather than their being a conserving ground for water." Such thinking was rare among economists of his day and was prophetic of more modern views such as the following:

"Exploitive agriculture offers great possibilities if carried out in a scientific way, but poses great dangers if carried out with only an immediate profit motive.... Irrigation without arrangements for drainage would result in soils getting alkaline or saline. Indiscriminate use of pesticides, fungicides and herbicides could cause adverse changes

379. *SDP* pertains to the USA as of 1990.

380. See *BNE*, 315-319 for a brief account. *WSP* is a technically competent analysis of some current plagues.

381. It is beyond my scope to offer a bibliography on these issues. A few of the writings that I have found worthy to be in such a bibliography are *EBR*, *ELG*, *EME*, *FHS*, *HES*, *HOE*, *KAS*, *LKC*, *LKG*, *PMO*, *RHC*, *SEA*, *SES*, *SSA*, *SSC*, *SSH*, *SSS*, the Van Nostrand Reinhold Soil Science Series and the NATO Advanced Science Institutes Series on Global Environmental Change.

382. See the last citation on p. 41.

383. This is just a metaphor. The Earth is not an organism.

in biological balance as well as lead to an increase in the incidence of cancer and other diseases, through the toxic residues present in the grains or other edible parts. Unscientific tapping of underground water will lead to rapid exhaustion of this wonderful capital resource.... The rapid replacement of numerous locally adapted varieties with one or two high-yielding strains in large contiguous areas would result in the spread of serious diseases capable of wiping out entire crops. Therefore the initiation of exploitive agriculture without ... first building up a proper scientific and training base to sustain it, may only lead us, in the long run, into an era of agricultural disaster rather than one of agricultural prosperity." {SFP, 152}

—and, alas, of such recent findings as the following:

"The negative repercussions of the high-technology-packaged Green Revolution, resulting from extensive water-logging, inadequate drainage and indiscriminate use of fertilizers, have reduced large tracts of once fertile land into saline and alkaline deserts. Large-scale deforestation to the tune of almost 17 million acres per year, extensive soil erosion, over-use of the precious water resources, and gross neglect of water recharge have severely degraded almost 1.2 billion hectares of land globally. One hundred million hectares of land, including a large part of the fertile Indo-Gangetic plain out of a total of 160 million hectares of arable land in India is already degraded; half of it has become unproductive." {RTS, 186}

I note, however, that Kumarappa never urged Nehru to set up a schedule of Pigouvian taxes and bounties, which might, if well designed and implemented, have been a sensible way to reduce certain kinds of ecological damage due to economic exploitation of India's natural resources.

And he failed to see anything of ecological or economic significance in the 20th-century population explosion.

Kumarappa's and Gandhi's worst mistake

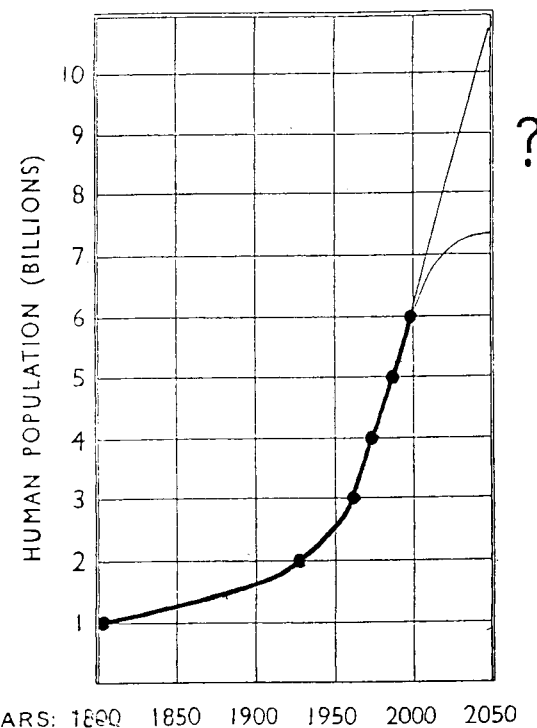
Kumarappa did not, as Gandhi did, argue against taking the only measures that might in fact have curtailed effectively and humanely the 20th-century population explosion in India.³⁸⁴ But whereas his first book includes tables {KPF, 20, 104} showing that between 1891 and 1921 her population had grown at a much slower rate than Britain's and that the density of population in India had decreased (as the territory had meanwhile expanded), none of his later writings discusses more recent data on population density. This seems to me a tragic failing on his part, because, as the graph shown on the next page suggests,³⁸⁵ the transition from the 19th- and early 20th-century pattern of world population explosion to the late 20th-century pattern had meanwhile begun.

384. See pp. 112-13.

The idea of market equilibria in closed-system modeling was uninteresting to Kumarappa and unknown to Gandhi, but I think their concern for the biologically important equilibria that are nowadays considered in open-system modeling would have led them, if they had lived until now and could see how overcrowded so much of South Asia has become, to take the population explosion seriously. I think that even Gandhi — in keeping with his precept that:

"Evil and good are relative terms. What is good under certain conditions can become an evil ... under a different set of conditions"³⁸⁶ {GCW, LXXXIV, 232}

—and seeing how ineffective his proposed alternative to the use of artificial contraceptives has proven,³⁸⁷ would by now have admitted that hundreds of millions of chaste marriages are a psychologically unfeasible remedy to the problem.³⁸⁸



385. The data for this graph is from *UNN*. *MWP* is an anthology of academic views in the USA in the mid-1980s. I agree with Myrdal's conclusion of 1968 {MAP, 1530} that "[T]he population explosion is the most important social change that has taken place in South Asia in the post-war era. It has been far more important than any reform or development efforts, and it has done a great deal to thwart those efforts."

386. Gandhi was here discussing the killing of animals that are dangerous to human life (a topic about which he was of two minds); he said, "In life it is impossible to eschew violence completely. The question arises, where is one to draw the line?". When asked in 1943 whether he was "no longer satisfied with the catching of snakes, rats etc., and the turning of them loose elsewhere, as is done in [his commune at] Sevagram and other places", he replied, "That is right. If one is not prepared to live in the company of these creatures oneself, one has no right to turn them loose on other people's land. For that is what it comes to." {GCW, LXXVII, 207-08}

387. See note 282.

388. The point was admitted already in the early 1950s by an eminent disciple of Gandhi's, Rajkumari Amrit Kaur, who was serving as the Republic of India's first Min-

Some links among these themes

Orthodox economists make an analogy between (a) currently poverty-stricken nations getting more into big-is-beautiful globalization, and (b) the emergence of modern-type prosperity in the USA and Western Europe during the 19th and early 20th centuries.³⁸⁹ This analogy led the Government of India to declare in 2004:

"In 1835 ... Lord Macaulay, the British historian and politician, had to admit before the British Parliament: 'I have traveled across the length and breadth of India and I have not seen one person who is a beggar, who is a thief. Such wealth I have seen in this country.' ... By 2020 the people of India will be ... healthier and more prosperous than at any time in our long history." (CIV, 31-32)

The World Bank's managers have also accepted the analogy, but have drawn different conclusions from it. An example worth reading next to the passage just cited, because of what they both say about health, is the confidential memorandum of 12 December 1991 from the Bank's chief economist³⁹⁰ to its staff, some member of which was so offended that (s)he leaked it:

"Just between you and me, shouldn't the World Bank be encouraging MORE migration of the dirty industries to the LDCs [Less Developed Countries]? I can think of three reasons:

"1) The measurement of the costs of health-impairing pollution depends on the foregone earnings from increased morbidity and mortality. From this point of view a given amount of health-impairing pollution should be done in the country with the lowest cost, which will be the country with the lowest wages. I think the economic logic behind dumping a load of toxic waste in the lowest-wage country is impeccable and we should face up to that.

"...3) The demand for a clean environment for aesthetic and health reasons is likely to have very high income elasticity....

ister of Health. She had for some time "set her face against all contraceptive devices" (SHI, 374), but by 1953 would speak in the following vein: "By making the people more conscious about the real need for family planning, the ground has now been prepared to embark on a countrywide program. ... A Contraceptive Testing Center has ... been established.... The search for cheap, simple, harmless, effective and acceptable contraceptives is in progress.... A high-powered Family Planning Board has ... replaced the previous committees." (KSW, 249-50)

BPQ is a clear and yet reasonably detailed account in regard to the time since then.

389. HMC is a book-length essay in this vein.

390. This was Lawrence Summers, an erudite closed-system economic theorist — Samuelson and the economist whose "Impossibility Theorem" Sen debunked (see p. 119) are his uncles — who in 2001 became president of Harvard University.

"The problem with the arguments against ... proposals for more pollution in LDCs (intrinsic rights to certain goods, moral reasons, social concerns, lack of adequate markets, etc.) is that those arguments could be turned around and used more or less effectively against every Bank proposal for liberalization." (SWV)

(In his preoccupation with crematistic models as shown in his statement that "measurement of the costs of health-impairing pollution depends on the foregone earnings," the author implicitly excluded, when he referred to "a given amount of health-impairing pollution," the possibility that the Bank might envisage a program to reduce that amount.)

I think, however, that the analogy itself will be rendered defective — a tragic illusion — by the combined effects of (a) pollution (including new "cocktails") and (b) relative depletion (i.e. lower per-capita amounts) of indispensable things like arable surfaces and serviceable water, and that to go on pursuing the ideal of a 20th-century American way of life in 21st-century China, India etc. would generate such unhealthy competition that international strife (including terrorism in a broad sense, not just bombing civilians from airplanes) would be bound to increase and to divert human energy and resources from the generation of wealth. It was Kumarappa who, notwithstanding his failure to notice the world population explosion, first warned against this.

Psychology and risk

Economists' reasonings depend often on psychological premisses. Section 1 includes some examples from Smith ("Every individual ... neither intends to promote the public interest, nor knows..."),³⁹¹ Marx ("The object which labor produces ... stands opposed to it as an alien thing")³⁹² and Jevons ("there is hardly a limit to the desire...").³⁹³ And yet insights of this kind as used by economists have traditionally been rough-hewn and lacking in the qualities of refinement and discrimination which scientific procedures build up:

"Most people believe they know how they themselves think, how others think too, and even how institutions evolve. But they are wrong. Their understanding is based on folk psychology, the grasp of human nature by common sense — defined (by Einstein) as everything learned to the age of eighteen — shot through with misconceptions.... Advanced social theorists, including those who spin out sophisticated mathematical models, are equally happy with folk psychology." (WCU, ix, 11th paragraph)³⁹⁴

391. See note 142.

392. See p. 70.

393. See p. 72.

394. The nascent field of "experimental economics" (see for instance ROV and FGF) may one day mend this defect of traditional economic theory.

In this light one can see that it was wise of Marshall not to try to explain *why* "every change in social conditions is likely to require a new development of economic doctrines,"³⁹⁵ and wise of Keynes to refer only vaguely to the "the psychology of the community" when he said that increases in aggregate income gave rise to smaller increases in consumption.³⁹⁶ It seems to me that Kumarappa likewise tried wisely to forego unnecessary psychological precepts. In the passage cited on pp. 44-45 (about a mill-owner's treatment of his workers functioning "like a nose-string to a bullock") he avoided relying on any concept of alienation or of the soul. He put the term "free will" in quotation marks in the last passage cited on p. 41, and his appeal to fear at the conclusion of that passage (where he says that by creating "quite a disturbance in the economy of Nature," humankind could destroy itself) allows implicitly for the likelihood that a Gandhian appeal to "social affections"³⁹⁷ may be insufficient to prevent humankind from destroying its ecological niche. A sensible balance between both kinds of appeal is envisaged in the following passage by Kumarappa:

"Beyond the pale of human society are our mute brethren who minister to our needs — animals, birds etc.... [They and] the land we draw our sustenance from, the water, sunlight, air and the rest of the physical world, claim our attention and regard while we strive to satisfy our needs. If we fail to consider these factors, Nature will retaliate."
{KGT, last page}

And I find the vagueness of this warning a virtue, inasmuch as a *very* valid open-system model is probably unattainable.

(Yet the warning should be heeded — because the stakes in rendering humankind's ecological situation ever more fragile are so high that she should exercise caution like a doctor avoiding gratuitously invasive procedures because (s)he knows that unforeseen bad side-effects are likely to ensue when a very complex system is tinkered with to a significant extent. In treating an individual human organism, a good doctor is cautious be-

395. See p. 74.

396. See p. 82. According to Keynes, probably "most ... of our decisions to do something positive, the full consequences of which will be drawn out over many days to come, can only be taken as the result of animal spirits — a spontaneous urge to action rather than inaction, and not as the outcome of a weighted average of quantitative benefits multiplied by quantitative probabilities." {KTE, 161-62}

397. Here I have used Ruskin's term (see p. 93). LHN is a scholarly account of Gandhi's formulation.

cause (s)he considers the system's viability more important than the size of the bill or the patient's success in an athletic competition. And, in dealing at large with the material aspects of human life, the probable gravity of the ecological danger in the foreseeable future (due to the unprecedented order of magnitude of modern rates of depletion and pollution, and the high stakes involved)³⁹⁸ is palpable even though the complexity of the phenomena renders the odds so incalculable that — to cite just one symptom — insurance companies have begun to find it impossible to make reasonably secure quantitative risk-assessments of the damage by fires, draughts, storms etc. in store for their clients due to global warming.)

I find also very sensible Kumarappa's use of the moderate word "tendency" in the following evocation of the Western concept of economic man:

"The tendency of the individual is to take a subjective, short-time view of life..., be it at whatever cost to society. The corrective should be supplied by society (through the state, religion or other forms of social organization) which alone can afford to take an objective, long-time view of things." {KVI, 5th paragraph}

On the other hand, I think that some of the techniques fostered by the AIVIA were based on too hopeful an estimate of how much arduous physical work they should entail.³⁹⁹ To see, as Kumarappa did, that palpable physical exertion helps maintain good health and spirits is one thing; to know how much is another.

Kumarappa vs Nehru

Nehru's proposed alternative to the forced integration (on British terms) of India into world capitalism was for the government to promote the development of a more or less similar kind of economy within India, but with

398. Blaise Pascal (1623-1652) is known to philosophers for his argument that if no god exists, then the theist loses (and the atheist wins) correct belief during this life but nothing afterwards (Pascal's premiss being that only a god could bestow a happy or unhappy afterlife), whereas if a god does exist, the atheist loses not only correct belief during this life but also — and this was decisive for Pascal — eternal salvation afterwards. People sensing today that ecological gambling could cause a very premature extinction of humanity may be impelled by *these* high stakes not to count on divine providence saving humanity from the natural consequences of the gambling.

399. See the sentences to which notes 86 and 257 refer. Kumarappa had (like Gandhi) not been obliged as a youngster to do arduous physical work, and after he joined Gandhi his health often suffered from overwork of one kind or another.

the imported concept of socialism providing (he hoped) a modicum of economic fairness. His "mixed economy" included the Community Development Program, but he never took very seriously Kumarappa's ideas about land reform, education, substantial "small-is-beautiful" development, soil analysis, subsidizing production of the most nutritious kinds of food rather than of less nutritious food for which there is an international market, collecting taxes from tillers partly in kind rather than all in cash, avoiding a national debt trap, preserving the forests, conserving water, etc. So I have described his economic program (at an early stage) as a "fuzzy compromise" (see p. 48). It might charitably be described as a first groping toward a "future where the local and the global will arrive at a historic reconciliation" (see p. 152). Either way, India should now reconsider in the light of historical experience and scientific knowledge about her worsening climate, the fast-declining level of her water-tables and fertility of her land, etc., the issues raised by economists like Kumarappa and Schumacher, and not take current American-style or Chinese-style globalization as the best alternative to Nehru's kind of program.

Echoes of Kumarappa's criticism of Nehru's economic policies have often resounded in more recent Indian assessments of those policies. The following⁴⁰⁰ are just a few samples that I have come across:

[2000:] "The mixed economy ended in combining the worst features of socialism and capitalism.... [It did not] deliver social justice and welfare.... Instead of delivering quality education and public health to the masses, it delivered subsidies ... to the better-off.... It was a noble vision of Nehru's which led to oppression by the state ... [working] on behalf of itself — the politicians, the bureaucrats, and the interests which directly support them." {DIU, 98}

[1998:] "Almost immediately after Independence the direction of State policy was being dictated by middle-class interests.... The developmental inputs generated [by the Community Development Program] were largely appropriated by the dominant groups in the countryside.... 80% of the people, and the overwhelming bulk of the poor, were agriculturalists, [but] the [overall governmental] allocation for both agriculture and

400. See also the passages cited toward the middle of p. 54 and (from Gunnar Myrdal) on pp. 125-26, and in notes 127 and 133. And see also VRE, 226-229.

RST is a well-researched critical assessment of Nehru's performance as prime minister. GEF and SEN offer well-written overall indictments of his economic policies. (Nehru's tendency already in the 1930s to waffle is illustrated in NSW XV, 646-649). If it were my role in a debate to defend Nehru against Kumarappa's accusations, I would argue that those who bear the responsibility of governing and do it with a genuine sense of responsibility to the public should be judged charitably. See for instance REH, 127-138, RIS, xiii and SHI, 375 (but also 385, the last complete paragraph).

community development in the first three five-year plans did not exceed 15% of the total outlay. In fact, the basic direction of the policies, at least at the level of implementation, was such that by the 1960s 'the main benefit of increased income and expenditure accrued to the ... richer sections of the population. The bottom 40% ... did not benefit at all from the economic changes that occurred.'" {VGM, 49-54, citing BPI, 292}

[1998:] "The way the programs for low-capital-intensive activities were designed suggests that their planners did not view these activities, despite the fact that they were labor-intensive and capable of generating large-scale employment, as bearing the possibility of being major instruments of industrialization in India." {SFD, 123}

[1998:] "Nehru and the Congress both ostensibly remained committed to reducing poverty by the planned modernization and welfare measures.... While statuses and benefits were somewhat altered in India during Nehru's prime ministership, the rural poor remained as vulnerable as ever." {SHI, 373}

[1997:] "From the mid-1950s, India pursued a strategy of capital-goods-led import-substituting industrialization.... Little progress was made in the direction of combating poverty, illiteracy and disease." {BJM, 211}

[1993:] "With the benefit of hindsight [one sees that] forced industrial growth ... financed by foreign aid and deficit spending ... seems to be of rather doubtful value." {REH, 137}

[1991:] "Nehru's vision prevailed.... The Republic of India conscientiously followed the principle of development from above and geared up its administrative machinery to this purpose. Under such conditions even a well-meant initiative like the Community Development Program was bound to fail as it became another bureaucracy providing jobs for those who had not made the grade for the higher administrative service.⁴⁰¹... [And] local government remained as starved of funds as it had been under British rule." {RMG, 131}

[1979:] "It is difficult to believe that the failure to improve the lot of even the bottom 5% or 10% of the population, in terms of basic foodstuffs, health or education, is really constrained by an overall lack of resources. It is to a much greater extent a question of how ... priorities are fixed and enforced within the economy." {CIE, 257}

[1987:] "The glacial pace of poverty reduction [in the Republic of India] contrasts with India's rapid development [meanwhile] as an industrial self-reliant power." {RPL, 10}

[1973:] "The Community Development Program started in 1952. Although it went through numerous vicissitudes during the following decade and a half, it succeeded in pouring ... public resources into the villages to help construct new roads, schools, health and recreation centers, irrigation projects, wells, drainage systems, storage facilities and warehouses, soil conservation projects, etc. Further, the Agricultural Credit Societies ... were greatly expanded ... [and] the same period witnessed signi-

401. Amartya Sen's concept of capabilities is as pertinent to this problem now as it would have been then if he had already elaborated it. Recent statistical findings have shown {DRP, 106} that the parts of India "with relatively low levels of ... human capital development were," in the 1990s, "not well suited to reduce poverty in response to economic growth."

ficant, though relatively modest, expansion in various kinds of marketing and distributive coöperative societies. There is almost unanimous agreement among the observers of the changing rural scene in India — whether local or foreign, or whether state-sponsored studies or those of independent scholars — that all these new measures have mostly benefited the richest stratum of the Indian peasantry." {GSI, 92}

[1961:] "Decentralization with emphasis on small-scale industries has been an accepted principle of planning in India all these ten years.... However, during the last five years little effort has been made to operate according to that approach ... and the reasonable aim of preventing technological unemployment while at the same time improving techniques had been lost sight of." {GPP, xi}

It seems to me, however, that the shortcomings of the government's anti-poverty efforts were due not only to the faults which Kumarappa pointed out but also to the birth meanwhile of so many more people into poverty-stricken families, and therefore that if family-planning had been accorded a somewhat higher priority among the government's programs, then the faults he saw would have been less telling in the long run.

Kumarappa vs Gandhi

An eminent Gandhian⁴⁰² published in 1991 the following description of Kumarappa as an economist:

"He could meet orthodox economists on their own ground and put across to them in terms of their own science the ideas that Gandhi had conceived. Rural reconstruction had mostly been talked about in the sense of urbanizing the countryside, mechanizing rural crafts and industrializing agriculture—in short, the introduction of urban values.... [But Gandhi] was out to free the village economy from the dominance of not only urban technology and urban finance but also urban values and the urban way of life. This could not be done by providing the villagers with, as Pandit Nehru once put it, 'all the amenities of city life,' but by freeing them from dependence on urban amenities by developing a different set of amenities, more suited to the rural environment, which would cost much less, and also enable the rural economy to successfully compete with the urban. It was this concept which Kumarappa put forth in terms of modern economic thought with a versatility and originality all their own." {SNK, 28}

This is informative, but the word "originality" covers some differences between Kumarappa's and Gandhi's views which I think were more substantial than the author realized.⁴⁰³ Two examples are that Kumarappa saw

402 See note 353.

403. Gandhi appreciated colleagues who were not "yes-men," but he seems never to have discussed with Kumarappa (the way he did now and then with Nehru: see note 248) any differences of opinion in regard to economic theory, but instead would make

positive as well as negative social consequences from the use of money and that he had nothing good to say about the modern caste system.⁴⁰⁴ Such differences are attributable in part to differences in background. (I have cited on p. 14 Gandhi's remark that Kumarappa came to him "ready-made.") The religious differences, for instance, are notable not only in that Kumarappa, brought up Christian, could hardly approach Gandhi's skill in appealing to Indian sensibilities, but also because Gandhi's anti-colonial pride in Hinduism prompted him — unlike Kumarappa — to invest credence in the myth of an ancient golden age in India. Kumarappa saw evidence of recent decline but rejected fanciful notions of the remote past no less than he did Nehru's common-sense approach to modernization⁴⁰⁵ and Davenport's concept of production.⁴⁰⁶

Kumarappa and Western economic thought⁴⁰⁷

Kumarappa studied in England and the USA, and his thinking was in the Western tradition (unlike, say, Qaddafi's or to some extent Mao Tse-tung's). His theories were based neither on any one religion (as Schumacher's were *vis à vis* Buddhism, or as in "Islamic economics"⁴⁰⁸) nor any one psychological doctrine.⁴⁰⁹ He was not a revolutionary, but called

remarks such as cited in notes 69 and 71. Of course they discussed (and sometimes disagreed about) the AIVIA's administrative problems; see *VRE*, 222-225.

404. See p. 91 on Gandhi's and Kumarappa's basic views in regard to money.

Kumarappa's advocacy (see pp. 38 and 57) of the responsible use of artificial fertilizers (together with other methods of maintaining soil fertility) is unusual for a Gandhian, but not necessarily contrary to Gandhi's own opinion (if he had one; he certainly knew Kumarappa's opinion, however. It is stated clearly in more than one of Kumarappa's books that he read).

405. *BDM* discusses modernization (as of the 1960s) as an historical phenomenon and mentions that it entails opportunities and "dangers that for the first time in human existence are global in character" {4}, that "Even the most advanced countries are still modernizing, and it is only by an effort of the imagination that one can conjecture which of their features are ... culture-bound idiosyncrasies" {9}, and that Rostow's views were an example of "parochial determinism" {191}.

406. See p. 13.

407. *VRE* includes a wealth of 20th-century Indian views of Kumarappa, and says (in the last page of its main text) that "One of the greatest legacies he left with us is to dig out the positive, progressive elements of Marxian, Gandhian and Liberal options."

408. See for instance *MIE*, *MIP* or *BIM*. *KGI* is an American account of the history of the modern concept of Islamic economics. *CHP* is a pertinent and comprehensive historical account of Islamic philanthropic institutions.

409. In 1942 Kumarappa described his scheme of "economics of predation," "of enter-

for a reformed version of the kind of thinking about economics in which he had been trained — some aspects of which he may have been the first economist to apply outside the West. He anticipated, for instance, Amartya Sen's most famous institutional finding.⁴¹⁰

While he saw how mass-production factories aggravate international competition for markets and for raw materials, and thereby tend more or less indirectly to cause wars, he did not apply to the global market economy the "demand-side" insight underlying the Keynesian view of national market economies: i.e. that cheaper labor can undermine market expansion because a condition most likely needed to sustain such expansion is for people with below-average incomes to have relatively more and more (rather than relatively less and less, *vis à vis* the rich) to spend.⁴¹¹ And he failed to promote explicitly the use of Pigouvian taxes.⁴¹²

He did, however, discard altogether the late-19th- and 20th-century idea, so tragic for humanity, that economic theory is value-free like physics. He held that its values should be (like those of medical science) humane — and this not only in regard to people currently in great need of humane treatment, but also in regard to future generations whom the orthodox economist dismisses with the reckless doctrine that they are bound to be able to solve any ecological problems caused by us which might be potentially fatal to the human species.

He called for economic thinking to be integrated with genuinely scientific knowledge as it becomes open-system. Some of his ideas in this vein may now be quaint because the relevant sciences have meanwhile progressed, but he nonetheless wisely foresaw, unlike other economists of his day, that to integrate economic and scientific thinking would entail taking seriously the macro-ecological problems of pollution as well as of depletion.

The simplicity of his mathematics is compensated for by those insights, by his pioneering effort to devise an adequate alternative to exclusively monetary economic reckoning,⁴¹³ and by the richness of his systematic

prise," "of gregarianism" etc. as being due to a "psychological study of human nature" (see p. 39), but it was not a psychological theory in the sense of explaining why or how such different kinds of behavior come about.

410. See p. 120 in regard to Sen's *Poverty and Famines*.

411. CGP sets out this argument in regard to globalization from ca. 1980 to 1995. See also note 216 above. FCU and RUA complement for an earlier period the narrative and analysis in CGP.

412. See p. 81.

413. See p. 52.

and comprehensive observations in regard to Indian rural economics (including his fairly clear distinctions between "home industry," "village industry" and "cottage industry"⁴¹⁴).

For these reasons, for his lonely (among economists of his day) insistence that agriculture and universal primary schooling⁴¹⁵ should be high priorities, and because he invented some valuable small-is-beautiful concepts and led, however inadequately, the pioneering small-is-beautiful movement in a very large country, he may one day be widely esteemed as having been a prophet of 21st-century economic thought. But if so it would, I think, be in spite of his counterproductive rhetoric, his failure to take from Keynes and Pigou some points that would have fit in well with his own insights, and his even more reprehensible failure to see that the population explosion was becoming sharply aggravated in the middle decades of the 20th century. I think it would reflect that since macro-ecological problems have meanwhile been growing far worse, there is now an objective need for people's concern for their own welfare and that of their families and tribes to be seasoned more than ever with concern for the future of our species and of life on earth; it would mean, in effect, that the following historical assessment by one of the most successful current American writers of popular nonfiction is valid:

"The twentieth century was a time of exponential scientific and technical advance, the freeing of the arts by an exuberant modernism, and the spread of democracy and human rights throughout the world. It was also a dark and savage age of world wars, genocide, and totalitarian ideologies that came dangerously close to global domination. While preoccupied with all this tumult, humanity managed collaterally to decimate the natural environment and draw upon the nonrenewable resources of the planet with cheerful abandon. We thereby accelerated the erasure of entire ecosystems and the extinction of thousands of million-year-old species [of life]. If Earth's ability to support our growth is finite — and it is — we were mostly too busy to notice.

"As a new century begins, we have begun to awaken from this delirium. Now, increasingly post-ideological⁴¹⁶ in temper, we may be ready to settle down before we wreck the planet. It is time to sort out Earth and calculate what it will take to provide a satisfying and sustainable life for everyone into the indefinite future. The question of the century is: How best can we shift to a culture of permanence, both for ourselves and for the biosphere that sustains us?" (WFL, 22)

414. See p. 51.

415. See for instance pp. 20-21, 24-25, 45 and 52, note 99, and note 139 and the citation to which it refers.

416. "Ideological" here means relying indiscriminately on an idea or theory.

APPENDIX 1
SOME BOOKS READ BY KUMARAPPA ⁴¹⁷

—The passages marked out in his copy of an anthology of writings by Prentice Mulford (see p. 5):

From "God in the Trees":

"We cage a bird for our own pleasure. We do not cage the bird for its pleasure. That is not the highest love for the bird." [44] "The more things in the world of Nature to which we can give the higher love, the more of their natural love and life shall we get in return." [44] "What strengthens the spirit must strengthen the body." [44] [When we demand persistently of the Infinite that new mind which can find and feel God in the forest or on the sea, then] "that mind with that capacity will gradually take the place of the old one, and with the new mind 'all things will become new.'" [47]

From "The God in Yourself":

"The more sensitive you grow, the more clearly will you see the law which leads away from all pain, and ever toward more happiness." [51] "'All things' are possible with God. God works in and through you. To say 'Impossible!' as to what you may do or become is a sin. It is denying God's power to work through you. It is denying the power of the Infinite Spirit to do through you far more than what you are now capable of conceiving in mind." [53] "No other person can judge what you really need to make your life more complete, more perfect, more happy, so well as yourself." [55] "The spirit of man becomes the stronger for all which it struggles against." [59] "My most rigid judge and surest punishment for all the evil I do comes from my own mind, the god or goddess in myself from whose judgement, from whose displeasure, there is no escaping." [59] "It is an inevitable law of Nature that what the human mind demands, that in time it gets." [60] "When we begin to see clearer, as now the more quickened and sensitive of our race do begin to see, we need no rod, any more than you need a man with a club to prevail on you to go to a feast." [61]

From "Mental Medicine":

"Prove the wrong by showing a better way." [81] "Men and women having the stronger element of thought move other men and women, of lower and less powerful thought, to their will." [83] "[To achieve such power] needs but the persistent desire of two things. First, to be in the path of exact Right and Justice to all, including yourself. Second, to be able to believe in the Supreme Power as a reality from which you can by simple but imperative demand draw ever more and more power (new ideas) to you and add it to you." [84]

From "Faith, or, Being Led of the Spirit":

"[Faith] is not merely [spiritual] knowledge. It is an acting and immediate power of moving events and persons." [86] "The Infinite Force has innumerable new paths and plans for men and women, few of which are now known, and you, as one of those men and women, have also your peculiar path and plan into which you must be led of your

417. Square brackets indicate page numbers or else text showing the context for some of the material that he underlined or otherwise marked out.

own spirit and not of any other person's advice or suggestion." [89-90] "The mood of demand or prayer will become habitual, and we shall be in it whether we are conscious of being so or not, just as your mind now may be in mood habitually joyous and cheerful, or gloomy and looking at the dark side of things, whether you know such is your mood or not." [92] "[The man of success is not today, as a rule, the scholar or student.] He is the man, however, possessed of the greater spiritual power, and every great fortune comes of a superior spiritual power." [95] "It is the body's continual assertion of itself and its physical senses that checks the spirit, and prevents it from acting." [98] "[Do not expect immediate success in liberating your spiritual senses.] A relative success may require months or years. It may come slowly. But it comes to stay." [99]

"Do not make for yourself rigid rules and set regular periods for 'sitting in silence or communicating with the gods.'" [99] 418

From "The Material Mind *versus* the Spiritual Mind":

"[The dominance of the spiritual mind means that the material mind will be swept away insofar as its resistance to the prompting of the spiritual are concerned. This dominance] implies that the body will become the willing servant or rather assistant of the spirit." [111] "'Holiness' implies wholeness, or whole action of the spirit on the body, or perfect control by our spirit over a body, through knowledge and faith in our capacity to draw ever more and more from the Supreme Power." [112]

From "What are Spiritual Gifts?":

"It is a spiritual gift, which, when matters look dark and squally, when debts are pressing, when friends seem to fall away and business falls away also, keeps your mind in a mood quite as buoyant and cheerful as when success shines on you." [114] "Your spirit can by degrees obtain such power [as to resist cold and be comfortable with much less clothing than the majority wear]. That is no reason why I should lessen the amount of clothing in cold weather before I have grown to or gathered that amount of force which shall so resist cold." [116] "[Yet] I should not fly to a pill or a stimulant at the first sign of pain or weakness but turn on first my spiritual or mental force, and in any case rely first and last on that." [116] That is the reason that you, if sick, feel so much better from the visit of a cheerful, hopeful, vigorous person. Such a person imparts the life element, and you from him or her receive and absorb it in thought." [117] "That is a spiritual power or gift, which, when you have formed a plan or purpose in your mind, causes you to hold to it and not be led, swayed, influenced, cajoled, tempted, jeered, or ridiculed out of it by others." [120]

"It is not wrong to own and enjoy the best things of this earth. It is a necessity and a benefit that all your finer tastes should have what they demand. [But there are just and unjust methods of getting the goods of earth.] Christ never preached that it was a duty to live poorly." [121-22]

From "Healthy and Unhealthy Spirit Communion":

"There is but one spirit that can be safely trusted. That is the Supreme Power and Wisdom which rules all things." [134]

From "Spells, or the Law of Change":

"No agency fetters the mind more or does more harm to both mind and body than a very close and constant association with a mind or minds inferior to yours in tastes, in refinement, in breadth of views and quality of motive." [152] "It is not what people say, it is what people *think* of each other that most affects them." [153] "The near presence of a person pleasantly disposed toward you, who wishes to bring you pleasure or benefit without 'an axe to grind,' will give you a feeling of rest and quiet, though such person may not say a word for hours." [153] "There is but one way of breaking the evil spell caused by continual association with the inferior mind or minds, which spell will surely prove fatal if continued in, and is indeed proving fatal to thousands at the present day. That method is an entire separation from such mind or minds." [153]

From "You Travel when you Sleep":

"Self-interest should prompt people to hate no one. It [i.e. hatred] weakens the body and causes disease. You never saw a healthy cynic, growler, or grumbler. Their soured thought poisons them. Their bodily disease originates in their minds." [228]

From "Where you Travel when you Sleep":

"A man without aim or purpose in life soon becomes inferior in intellect." [234]

From "The Church of Silent Demand":

"It is a law of Nature that you cannot be really permanently benefitted yourself without benefitting others. Every 'perfect gift' is a gift not sent to you only, but to others." [262] "[If we, in mind, say in our prayer,] 'I want one particular thing very much, but if a wisdom greater than mine sees that it is not good for me in the shape that I want it, then I will not demand it'; [we shall] in time receive a perfect good and a good which will come to stay. But if we will not so defer, but say and pray in this spirit: 'I want what I demand anyway, I defer to no higher wisdom; I don't care if what I want is an injustice to others or not'; then we shall in time still receive what we desire, if persistent in that desire or prayer. But it will prove an imperfect gift and a one-sided pleasure, with more of the bitter than the sweet—as much a curse as a blessing—a gift with which we must part in time, so great will be the trouble or pain inflicted by it." [263] "Ask and ye shall receive. Ask imperiously, but ask in a willing mood for what the Supreme Power sees best for you. Love your neighbor as yourself, but demand good first for yourself, that you may be the better fitted to do good to all." [267]

—The passages marked out in his copy of Kenneth MacLennan's *The Cost of a New World* (see pp. 10-11):

"England has scant regard either for religion or humanity." [22] "'Along the African coast, the man stealer, not the missionary, was the representative for generations of British interest in the native.'" [22] "Exploitation went on merrily." [22] "The spirit of evil was too often in the ascendant. Commercial penetration and development of natural resources, telegraph lines, roads and harbors do not always mean progress in the ideal of trusteeship."⁴¹⁹ They have been and may still be the channels of exploitation." [22]

418. Kumarappa neither practiced yoga-like meditation nor in later years attended church.

"The new ideas [of Voltaire and Rousseau] were too strong for any despotism to destroy." [25] [Yet] "the Church has too often been opposed to new movements of thought and to anything that seemed to affect the social fabric, from considerations relating to transient and superficial events, and not by any process of reason, or because of the positive vitality of its life or a fresh application of the principles of Jesus. This attitude often leads to an evil reaction—the dechristianization of many new movements which are really in the interests of progress, and in which the powerful influence of religion has for a time at least been lost with disastrous results." [26]

"[The industrial revolution] has stimulated research and created a demand for knowledge, it has made accessible in cheap form the literature of all the ages, has been the handmaiden of science and art, and has vastly promoted human comfort." [28] [And yet] "[With the mushroom growth of industrial towns,] now over three fourths of the people of Great Britain are housed in urban areas. This crowding of population⁴²⁰ has created bad housing conditions. In Scotland nearly half of the population are living in one- or two-roomed houses, or to put the facts in another form, about forty-five percent of the population of Scotland are living more than two to a room. These housing conditions are reflected in health: high infant mortality and urbanization go together." [28]

"Industrialism has given to the world [a] war between capital and labor. Employers and employed have formed opposing camps, and so we have Employers' Associations and Trade Unions. The latter were at first illegal, then tolerated, then free, and are now very powerful, though less so than just before the War. The last century witnessed a long fight for wages, for hours, for conditions of work, for liberty to combine, and for a share in the control of industry. The Factory Acts are a record of struggle to minimize the growing evils of industrial life. Antagonism grew with the years of struggle." [29]

"[Our life during the last century has been] spiritually defective in that people are more concerned with things than with ideas or people." [31]

"[European civilization has expanded until at the beginning of this century practically the whole world of color,] bowing to superior force, acknowledged white leadership." [43] "The primary motive [for this aggressive expansion of European influence] was search for wealth." [43] "[A higher and nobler conception has grown up of] trusteeship [for backward peoples, but,] on balance, the motive of self-interest still plays a large part⁴²¹ [in the relationship of white peoples with those of Asia and Africa]. [43]

"[After the decisive defeat on the plains of Manchuria of white Russia by yellow Japan, the white man was no longer considered invincible, and] the World War put an end to his prestige. He lost face throughout the world in statesmanship, in arms, and in religion. Today all races are self-conscious and challenge any suggestion of inherent inferiority." [44] "[In North America] seventy-eight per cent of the colored people [are]

419. Cf. Kumarappa's later statement (cited on pp. 120-21) that to tally amounts of roads built, wells dug, fertilizers distributed etc. is a poor way to assess development.

420. Cf. Jane Jacobs's praise (cited on p. 137) for densely populated urban neighborhoods.

421. Joseph encircled these three words and commented, in the margin: "only!"

now able to read and write." [45] "[There is a school of white men, ably represented by Lothrop Stoddard,] who argue that the rest of mankind is inherently inferior, physically, mentally and morally to the people of northern Europe, and must, for the preservation of the nordic race, be kept in perpetual subjection. It might be said in answer that the nordic race is a myth.⁴²² the Finns are Asiatic, the Scots are Celts, and so forth. A study of race migration would suggest that 'race' itself is a myth. Stoddard does not seem to allow enough for the fact that stability in civilization rests on character alone. History contains no record of any people being able to keep another in perpetual subjection.... The nordic peoples are not supremely gifted. They are rich in soldiers, seamen, adventurers, traders—in short, conquerors—but they have not the monopoly of prophets, poets, artists and statesmen. The founders of all the great religions were Asiatics. The nordic race has distinctive gifts,⁴²² but so have the other races." [50]

"The rising tide of youth is one of the signs of the times. It is marked by intellectual alertness, by social passion, by a refusal to bow to tradition or authority, or time-worn convention or custom. It does not hold gray hairs in reverence; it frankly scorns middle age." [53]

"The close association between industry and armaments has had its reaction in the East, where the gift of modern armaments cannot be reckoned as a gain to the welfare of the people." [79] "No one would contend that the Indian army budget of \$400,000,000 can be anything but an intolerable burden on her resources." [79] "India is perhaps the poorest country on earth." [83]

"England was the chief of sinners in promoting the African slave-trade to America. Her colonies there were partly carried on at the expense of the poor African, and in the hundred years preceding 1786 the number of slaves imported into British colonies exceeded two million. British interests in Africa were mainly centered in the slave-trade. Indeed the African slave-trade ... was a coveted prize secured to Great Britain by [the Treaty of Utrecht]. [88] In two and a half centuries eight million Negroes were, 'at the lowest computation,' carried across the seas, and it is estimated that about forty million more perished through the bloody traffic. Bristol, Liverpool, and other British towns laid the foundation of their greatness largely on the slave-trade with America." [89]

"The real evils of any policy lie in the principles on which it is based, and the reasons which impelled men to carry on the slave-trade should, rightly understood, be compass and chart in many difficult issues of our time concerning primitive peoples." [90]

—Some passages marked out in his copy of W. E. S. Holland's *The Indian Outlook: A Study in the Way of Service* (see pp. 10-11):

"It is not good for the virility of any people to be too long in political subjection." [29] "The ...Rowlett Act... was passed [1919] with a practically unanimous India against it.... To the Indian peoples ... it seemed an insult." [45] "It is in the fitness of things," writes Tagore, 'that Mahatma Gandhi, frail in body and devoid of all material resources, should call up the immense powers of the meek.' [66] "Since 1919 Britain has lost...

422. To say that the nordic race "is a myth" and yet "has distinctive gifts" was to slip into self-contradiction.

India's trust and confidence. This distrust was formerly confined to the intellectuals, but today it has spread through the whole of the population ... [because of Britain's] failure to fulfil the promises made in the stress of the war when she needed help." [108-09]

"[Britain] has begun the exploitation of India's vast mineral resources." [153] "The failure to deal adequately with national education cannot but be laid at the door of authority.... At the end of a hundred years of British rule there is hardly any appreciable improvement in the economic condition of India's sixty million outcastes." [154]

"India's economic expansion has been severely limited by consideration for British interests.... India has been developed principally as a feeder for English markets and a market for English manufacturers." [155-56] "The competition of Lancashire machine-made cotton was allowed to kill India's cottage industry. No great imagination is required to picture the mass of suffering and poverty which followed.... But for the government of India to have any other aim than India's welfare, or to be deflected by the competing interests of the ruling race, is to be guilty of treason against the nation committed to its trust." [158]

—Abstracts by me of some books on economics which Kumarappa read (in addition to three by Seligman, from which he took 90 pages of notes) in prison in 1932-34 (see pp. 28-29):

Henry Carter Adams, *Public Debts. An Essay on the Science of Finance* (1888). Adams (1851-1921) was an American who had, like Seligman, studied in Germany and been influenced by *Kathedersozialisten*. This 400-page account of "the principles which underlie the use of public credit" includes chapters on the "industrial effects" of public borrowing, the political and social effects of public debts (with attention to conflicting interests within any one country and to how foreign debts "endanger the autonomy of weak states"⁴²³), the financial management of wars, etc. There is a substantial discussion of local-government borrowing (in the course of which the author says (p. 368) that municipal corruption is likely when "justice and common honesty are not demanded by prevalent business sentiment."⁴²⁴)

An anonymous "British-Indian," *Finance and Commerce in Federal India* (1932). This was written just after Gandhi's visit to England for negotiations (which were unsuccessful). The author, obviously British and well versed in the details of the negotiations and of British laws and administrative structures in India, argued suavely that only "in a few cases" was there any conflict of interests between Britain and India; everyone wanted to maintain India's financial stability and credit in world markets; there was really no "un-

423. "When peoples of altogether different degrees of industrial development, different habits, different views of life, and different forms of government, enter into this relation, it is not at all exceptional for the inferior people to find themselves delivered over to practical servitude." (APD, 50-51)

424. Insofar as a general consensus favoring justice is concerned, this fits in with Ruskin's idea (see p. 97) of a "stream of justice" advantageously permeating society.

bridgeable chasm ... between the loyalty of India to her idea of self-government and the loyalty of the British administration to its conception of trust." During the period of transition to "the establishment of a Federation for India", she should accept "such checks and safeguards as are recognized to be in" her interests, yet these should "as far as possible" not be "imposed upon the country by outside authority." The chapter titles include "Voting of Supplies," "Money Bills," "Capital, Debt and Remittance Transactions," "Consolidated Fund Charges," "Loans," "Exchange and Currency," "Orderly Finance," "The Demand for Safeguards" (against "unfair discrimination in commercial matters," e.g. licensing British factories in India like in "Southern Ireland ... which exercises an uncanny influence on the course of Indian politics"), "Individuals and Firms Carrying on Business in India," "British Trade with India," "Commercial Treaties," "Allocation of Resources," "The Federal Budget," "Residuary Powers of Taxation," "Adjustment of Inequalities," "Allocation of Liabilities," "Borrowing," "Accounts and Audit," and "Cash Balances."

Hubert Blake, *World Disorder and Reconstruction* (London 1931). This is not about India but about the Great Depression. It recounts how, during World War I, "particular industries were expanded to secure a volume of production that [had] never since been required of them", how a "substantially higher ratio of unemployed persons ... marked even the relatively prosperous years [after] the War, and, ... while chiefly a most distressing human problem, [had] additionally, of course, important economic bearings in wasted productive capacity," and how "the financial chaos that paradoxically followed close upon the return of peace" also hurt the economy; and recommends "monetary reform and further progress in the orderly development of large-scale industrial organization."

Charles Whiting Baker, *Pathways Back to Prosperity* (New York 1932). Baker, an engineer and economist,⁴²⁵ considered the current mass unemployment (his main concern was the USA) to be due to "no ordinary cyclical business depression," but rather to "the development of labor-saving machinery." He recommended "shorter working hours," "the transfer to the wage earner of a larger share of the products of industry," "state unemployment insurance," "some better means of organizing our banking system so as to lessen the risk of ... wholesale bank failures," a "restoration of public confidence" (to bring an end to the hoarding of currency and gold due to the "fear-complex" which had grown up since the stock-market crash of 1929),⁴²⁶ economic councils to "protect the consumer from profiteering and from education to extravagance" (the book is 360 pages long and this is its only use of italic font for emphasis), "a sales tax on luxuries" (e.g. wine and

425. His first book on economics had been published in 1889; an essay on wartime control of industry in Britain and the USA had been published in 1921 by Oxford University Press for the Carnegie Endowment for International Peace.

426. A few months later the new president, Franklin Roosevelt, made his famous declaration, "The only thing we have to fear is fear itself," and proclaimed a legal "bank holiday." "That proclamation... [was] like a streak of lightening out of a black sky. Men ... accustomed to the old ways of individualism were incredulous before the threat of prison sentences and heavy fines for hoarding currency and gold." (LRR, 82)

beer), and "fostering a broad movement back to a very simple self-supporting life on the farm and to the development of local industries in the smaller cities and towns."

Arthur Salter, *Recovery, The Second Effort* (London 1932). The title refers hopefully to the proximate future as distinct from immediately after World War I. On the dust jacket are a dozen recommendations with phrases like "consummate skill" and "difficult to overrate"; according to one of them, the author was "the most constant figure at the centre of world affairs since the war"; and Harold Laski declared, "Books such as this are written only once or twice in a generation." It narrates European political as well as economic developments since the war, and analyzes a variety of specific moments and also some broader trends going considerably far back and ahead in modern history, e.g.:

"There have been periods in which impoverishment was due to ... an inadequacy of ... man's power to utilize [natural resources]; and the time may come in future centuries when the increased population of the world [Earth] will press hard upon its available supplies, and when diminished [material] standards and ultimate starvation will be an inescapable necessity for its surplus mouths.... [However,] ours today is a problem of impoverishment that comes from plenty. ...It is incredible that such causes should permanently prevent the world [i.e. humanity] from utilizing and enjoying the resources at its disposal. Under the pressure of sufficient necessity, man is an adaptable creature; and he will in time, beyond question, find the solution. But ... if we are to avoid a period of misery and disruption which may threaten the fabric of our present civilization, we need a renewed effort of searching analysis and constructive reform in our Western world, comparable in boldness to that which is now being witnessed in Russia, however different be the goal and the method." {SRS, 8-9}

The chapter headings are: "Relapse and Recovery — The Second Effort," "The Passing of an Era — The Competitive System in Transition," "Impoverishment Amid Plenty — The World Economic Depression," "Confidence and Collapse — The World's Financial Crisis," "Gold — Tyrant or Constitutional Monarch? The World's Monetary System," "Good Lending and Bad — The World's Credit System," "The Dead Hand — Reparation and War Debts," "Precept and Practice — Commercial Policy and Tariffs," "The Good and Evil of Cartels—Industrial Organization," "Safeguards of the Public Interest—Collective Leadership and Control," "Armaments and Alliances — The European Scene," "Versailles and Geneva — A Decade of Treaty-Making," "The Way to Security — Covenant and Kellogg Pact," "First Aid Measures — The Task of 1932," and "A New World Order — Our System Reformed and Transformed."

James Francis Horrabin,⁴²⁷ *An Outline of Economic Geography* (1923). An initial chapter on geographical factors in history is followed by ten other chapters: on the historical significance of river valleys (e.g. the Nile, the Ganges), seas (e.g. the Mediterranean), the ocean, and land-transport, and then "the world today" and, under that heading, America, the British Empire, the Far East, Russia, and France, Central Europe and Africa.

427. Gandhi met with Horrabin in London in 1931 (see GCW XLVIII, 21, 249, 289, 381 & 463) and on 3 January 1932 sent him a long and grateful telegram {GCW XLVIII, 485-86}.

According to *The New York Times Book Review*, "Mr. Horrabin has a singular knack of putting his finger on the essentials of a complicated matter and presenting its important factors." {HAC, 1938 edition, frontispiece}

H. G. Wells, *The Work, Wealth and Happiness of Mankind*. Wells had been a pioneer in science fiction {WTM, WWW} and a Fabian socialist. His *Outline of History* (1920) was so successful that he undertook two other major works of popular education: *The Science of Life* and *The Work, Wealth and Happiness of Mankind*. This latter is a sprawling, generally optimistic compendium of sociology and of descriptions of then-modern technology, yet with some traces of apprehension—for instance that if the USSR were to "survive and give a semblance of success," then the "insurrectional tension of the Atlantic peoples" might lead to a brutal clash between rich and poor in the West. A number of photographs are included (and this may have influenced Kumarappa to include (woodcut) illustrations in *Economy of Permanence*). The frontispiece to Volume II shows a flapper driving a sports car and is captioned, "The Machine and Humanity. Power and danger in human hands. Along what roads, in what emulations, and to what ends will our great machines be driven?"

In Kumarappa's notes many of the chapters are represented merely by their titles, but there are also some jottings of ideas such as "Change of wealth from directive ownership to a monetary claim on production," and:

"Alleged advantages [to society] of a rich class:

In sciences, research and inventions[;]

Freedom of speech & press[.]

Disadvantages: Luxury and waste[.]

Poverty is not caused by wealth. The rich do not desire to keep people poor.

Ford, Edison etc. use their power to enrich the world. Poverty is law of nature."

Gerhard Dobbert, ed., *Red Economics* (1932). This is not Marxist theory but an account of the USSR with sixteen well-focused essays by Western journalists (the Moscow correspondents of *The New York Times*, *The Christian Science Monitor*, the *Kölnische Zeitung* (Cologne), the *Neue Freie Presse* (Vienna) etc.), a Swiss architect (on housing problems), the director of the German railways (on means of communication), a lecturer at the German Academy of Political Science, etc.

Silvio Gesell, *The Natural Economic Order* (Berlin 1929). This is about a theoretical plan to "secure an uninterrupted exchange of the products of labor, free from bureaucratic interference, usury and exploitation." The plan embraces land reform and a scheme for governments to abandon the then common precious-metal standards of money and instead to issue periodically a certain judiciously determined sum, in the form of paper currency and postage-like stamps (for small amounts). Money would by law automatically lose 1/1000 of its face value weekly, hence some 5% annually (and presumably the face value of routine promissory documents such as checks would likewise diminish). Currency holders would uphold its face value by periodically affixing stamps to make up for the 1/1000th-per-week loss; and every so often, old money would cease to be legal tender but could be redeemed for fresh currency not yet topped up with stamps. The constant decay in face value would encourage people constantly to spend for goods and services,

thereby stimulating the economy in a healthy way. And "the currency office ... would intervene decisively [now and then] to establish a fixed general level of prices, thereby protecting honest trade and industry." Kumarappa never proposed any such scheme for India, but the following observation is sometimes echoed in his writings:⁴²⁸

"The traditional form of money has one tremendous advantage over all other goods, namely that it is indestructable. The products of our labor cause considerable expense for storage and care-taking, and even this expense can only retard, but cannot prevent their gradual decay.... In commerce, therefore, the capitalist (possessor of money) can always afford to wait, whereas the possessors of merchandise are always hurried. So if the negotiations about the price break down, the resulting loss invariably falls upon the possessor of goods, that is, ultimately, upon the worker (in the widest sense)." (GNO, 217)

André Philip, *India: A Foreign [i.e. French] View* (1932)—a blend of anthropology, history and journalism, with sociological and political as well as economic points. The first part is entitled "Agricultural India"; its chapter headings are: "The Social Structure" (e.g. caste, family, village administration, and the political and economic effects of British rule); "Rural Distress" (average income, famines, death-rate, birth-rate, etc.); "The Exploitation of the Peasant" (historical and current systems of land allotment, rates of taxation, money-lending); "The Coöperative Credit System" (village primary societies, the central banks, etc.); "Antiquated Agricultural Methods" (the kinds of things examined in greater detail in Kumarappa's second book; ignorance and fatalism); and "The Need for Industrialization" (as India had been "one of the richest manufacturing centers of the globe" until the British had brought about "the ruin of the artisan class" and thereby "the creation of a rural proletariat"). The second part is entitled "Industrial India" and its chapters, likewise detailed in content, describe "The Progress of Industry" (mechanization; cotton, jute, iron and steel; British capital), "The Working Class" (emigration to towns, labor conditions and wages, bribery, inefficiency, child labor, housing conditions, moral degradation, Gandhi's impact, etc.) and "The Labor Movement" (with historical narrative and analysis). The third and last part is entitled "The Political Aspect"; its historical narrative includes "Macaulay's educational reform ... to build up an Anglicized elite," the founding of the Indian National Congress, etc., down to the Nehru Report (1928) and the Lahore Congress (1929).

(The book was originally in French. An introduction by an English aristocrat to the translation cautions the reader that "India is not, and never has been, a nation," "the so-called 'massacre' of Amritsar was by no means an act of brutal violence," etc.)

John Strachey, *The Coming Struggle for Power* (1932). This book is described by a recent historian (BDV, 169) as having been influential in the 1930s. It is an appeal, supported by analysis of the history of capitalism and of modern Western culture, for the "inevita-

428. For example in *SKE*, 36-37 he remarked that "The bargaining power of a seller of perishable bananas or fish is not on a par with that of the buyer, the holder of imperishable gold."

ble" Communist revolution to be carried out in Britain. Part 1 analyzes the gradual historical emergence of capitalism. Part 2, "Capitalism Today," has chapters entitled "Monopoly," "Nationalism," "Unstable Money," "Capitalist Crisis," and "Back to the Market?" (to which the author's answer is that "only the least historically minded men on earth, only English economists, could" dream of it). Part 3, "The Decay of Capitalist Culture," has interesting chapters on literature and religion (and a remarkably weak one on science). Part 4, "The Future of Capitalism," has chapters on imperialism, monopoly and Fascism. Part 5, "The Political Struggle in Britain," has witty chapters on recent British politics and on social democrats. Part 6, "Communism," has rather tiresome chapters on "The Nature of Communism" (using phrases like "Communism is" and "Communist practice is" to describe an ideal), "The Future of Great Britain" and "The Salvation of the British People."

Patrick Geddes, *Cities in Evolution* (1915). Geddes (1854-1932) was a professor of botany in Scotland for thirty years and then, in the early 1920s, of sociology and civics at the University of Bombay. This remarkably lively book (which Gandhi too read in prison, ten years earlier)⁴²⁹ is mainly about town-planning for the sake of "completeness of relation [between] organism, function and environment," but offers also a vision of human history in terms of changes in the use of consumable energy. (Fiscal accounting is criticized for neglecting "dissipations of energy" and of useful materials.) Geddes saw three main historical phases: (1) a good, rustic one ("Medieval town planning ... anticipates that of our Garden Cities"), (2) a bad one of crude technology ("paleotecnic"), nastiness ("squalid Kakotopias"), money-wages, drudgery and male dominance, and (3) the dawn of an age of advanced technology ("neotecnic"), healthy living, localism, and feminine vitality:

"True Rustic Development, true Town Planning ... must embody the full utilization of its local and regional conditions, and be the expression of local and of regional personality. 'Local character' is thus no mere accidental old-world quaintness.... It is attained only in the course of adequate grasp and treatment of the whole environment, and in active sympathy with the essential and characteristic life of the place concerned." (GCR, 396-97)

"The contrast between the money wages of the passing present and the vital budget of the opening future is one which must go more and more literally home—and into every life—woman's life above all....

"Historically treated, architecture has seemed too long but a description of buildings, like fossil shells and corals, past and dead. Yet as an evolutionary science it begins anew with the living and growing city reefs.... The old-world rustic order with its working yet prosperous housewives, the comparatively recent and modern contrast of social ranks, with drudgery and futility at its extremes, are broadly recognized as historical strata of the reef; while beyond this we ... predict and plead for the incipient domestic order: electric, hygienic, eugenic! The drudging charwoman, the futile fine lady alike disappear; and woman, at once elemental and involved, vigorous yet refined, will reappear within her home, and be at once effective in the kitchen and inspiring in the hall.

429. GCW XXIII, 179. Geddes and Gandhi had corresponded in 1918 (GCW XIV, 331).

"But such homes, still less whole towns of them, cannot be made offhand by town planners. There must be the effective demand, the revolution in thought, from the paleotecnica to the neotecnica, from the money gains of man to the vital budget of woman.... [Just] as women have not only responded to each uplift of religion, each advance of culture, so it will be again; and their recent and rapid arousal to political interests and discussions is but an earnest of their coming citizenship." (GCR, 141-43)

—Abstracts by me of five other books that Kumarappa owned at the end of his life:

André Siegfried, *England's Crisis* (translated from French, New York 1931; the same author's *America Comes of Age* had been a best-seller in the late '20s). This has (a) an introductory section on free trade and Britain's economy in the 19th and early 20th centuries; (b) an account of her economic crisis after World War I, with chapters on the shrinkage of her exports, her high industrial costs, balance of payments, foreign-investment policy, variations in industrial profits, unemployment, etc.; and (c) a discussion of possible remedies, with chapters on public opinion, the ruling class, changes in her political system, industrial rationalization, inflation, commercial protection, economic relations with the Commonwealth and colonies, political alliances, etc.

Warren B. Catlin, *The Labor Problem in the United States and Great Britain* (1926). Part I describes the "origins and sources of a wage-working class." Part II is entitled "Grievances" and includes chapters on unemployment, overstrain and superannuation, concentration of wealth, and occupational hazards (industrial accidents, various kinds of poisonous dust, abnormal temperatures, humidity etc. conducive to diseases such as tuberculosis, trauma from riveting-machines, etc.). The remaining three parts are entitled "Unionism," "Labor Politics" and "Collectivism." The last chapter outlines a "working creed" and includes statements like: "Health, intellectual freedom, culture and morality are more important than material prosperity and advancement. There is, to be sure, no necessary antagonism," and "It is particularly the function of the state, as the representative and guardian of the common welfare, to set up and enforce minimum standards for the conduct of industry and trade." The author was an American professor of economics.

W. R. Aykroyd *et al.*, *The Rice Problem in India* (Calcutta 1940). This has detailed information about milling and about nutrition, and may well have influenced Kumarappa's characteristic way bringing those topics together.

Sam Higginbottom, *The Gospel and the Plow, or, The Old Gospel and Modern Farming in Ancient India* (New York 1929). Higginbottom was a missionary who founded at Allahabad an institute, much appreciated by Gandhi, for agricultural research. Gandhi first met him in 1916, often expressed admiration for his work, and several times (down to 1944) called upon him for advice about—and occasionally sent him colleagues for training in—agricultural techniques such as are discussed in this book. Their relationship was formal but became nonetheless quite warm. On the occasion of the public meeting in 1916 at which Gandhi took exception to H. S. Jevons's view that economic theory is morally neutral,⁴³⁰ Higginbottom had supported Gandhi's view that all economic problems are inextricably bound up with moral ones.

Ehrenfried Pfeiffer, *Soil Fertility, Renewal and Preservation. Bio-dynamic Farming and Gardening* (London 1947). Pfeiffer directed experimental farms in Switzerland, Holland, Germany and the USA, using organic fertilizing preparations etc. which had been initiated in the 1920s by Rudolf Steiner (the founder of "Anthroposophy" and of "Waldorf" schools),⁴³¹ and developing methods—many of them explained in the book with tables and photographs—of manuring, composting, crop-rotation, mixed planting, animal husbandry etc. An introduction by a British aristocrat, Evelyn Balfour,⁴³² distinguishes among "chemical," "biological" and "ecological" approaches to agricultural research—the chemist working "within the confines of his laboratory, or at most... [in] areas no larger than the small field plot," the biologist knowing that "laboratory results are not necessarily valid under field conditions," the ecologist extending yet further the scope of investigation—and calls the book "an important contribution to the study of ecology." Kumarappa may perhaps have met Pfeiffer and/or Balfour in postwar England. In any case, some of his later writings seem to echo a passage in the book (in the chapter entitled "The Soil, A Living Organism; The 'Load Limit' in Agriculture") from which the following remarks are excerpted:

"The most important humus-maker in cultivated land in temperate zones is the *earth-worm*.⁴³³ It digests organic refuse combined with the mineral components of the soil, and then excretes humus. It also aids soil drainage by making small holes and passages ways.... It is estimated that the soil of a meadow in good condition contains from 200 to 300 pounds of worms to the acre.... [But] soils intensively treated with chemical fertilizer for a long time ... [become] devoid of earthworms—that is, devoid of the creation of new humus."

S. Lakshminarasiah, *Indian Economic Problems, or The Way to Prosperity in the Light of Advanced Knowledge and Recent Experience* (Vizianagram 1935). This book is no less daunting than its title. The headings are, for Part I: 1. "Wealth, what constitutes — Utility, value and price defined and illustrated"; 2. "Demand, nature and meaning of — Supply, how determined — Limits and restrictions"; 3. "The several meanings of monopoly — The different classes: natural, public, fiscal, social and artificial — Evils and remedies — Combinations"; 4. "Production, the factors of — Localization: benefits, evils"; 5. "Machinery and modern production — Machinery and wealth distribution — Machinery and labor — Machinery and over-production"; 6. "The sale of labor — The life of woe"; 7. "The remedies — Trade unions — Socialism — Socialism and state ownership — The Russian model." For Part II: 1. "Land and rent — The importance of agriculture — Farm organization — Capitalistic methods of farming — The size of a farm — Rent, what constitutes — The law of diminishing returns — Whether rent an element in

430. See p. 75.

431. For a brief account of Steiner (though not mentioning the farming, which he took up only toward the end of his life) see *WBB*, 145-156 and 248-253.

432. She had written a related book (*BLS*), and her introduction to Pfeiffer's book refers at the outset to a famous study (*JWR*) of soil erosion.

433. Charles Darwin (*DAW*) had first developed this argument.

value and price — The rent element in wages and profits — Rent, an unearned income — Whether rent is justified"; 2. "Problem of population — The Malthusian theory — The causes of increase — How it acts on production and standard of life — [Population] increase and labor efficiency, whether compatible — Restriction of numbers a necessity with a country like India — The methods of birth-control examined — Biological and medical views on the question — Remedies"; 3. "Capital, meaning of — Origin and increase — Facilities necessary for accumulation — Theory of interest — Is interest justified? — Rate of interest — Agricultural indebtedness"; 4. "Economic value of cattle — Agriculture and cattle-rearing — Dairy-farming — Pastures — Cattle diseases — Veterinary department and animal relief — Breeding bulls — Cattle insurance — Cattle protection — Prevention of cruelty"; 5. "Agricultural research — Irrigation works — Cattle manures — Green manure — Oil-cakes — Bone manure — Sewage and other kinds of manure — Seed selection — Plants and pests"; 6. "Rural uplift — Education, what is proper? — Touring lectureships — Cinematograph-library and reading-rooms — Broadcasting — Demonstration-marketing — Panchayat-coöperation." For Part III: 1. "Unemployment and poverty — Agricultural short employment — Industrial unemployment — Educated unemployment — Universities, how far responsible — The beggar-problem — The different classes of beggars — Organized charity — Relief works — Is the country prosperous or poor? — Poverty and standard of life"; 2. "Economic backwardness, the causes for — Hindu religion — Caste system — Joint family — Marriages — [The] drink evil — Jewel-mania — Litigation — Sanitation — Railways"; 3. "Free trade, protection and imperial preference — Claims of each, examined *in extenso* — The Ottawa Agreement, whether a boon"; 4. "Solution of agricultural short employment — A difficult choice — The case for khadi — Silk industry — Sugar and jaggery — Fruits — Dates — Bee-keeping — Poultry farming — Oil-industry — Salt — Mercantile marine"; 5. "Remedies for educated and industrial unemployment — Science and industries — The tanning industry — [The] glass industry — [The] aluminum industry — Pottery — Pisciculture — Forests." For Part IV: 1. "Money — Barter — Metals — Standard and token coins — Seigniorage — Gresham's Law — Bimetallism — Supply and value of precious metals — Gold — Platinum"; 2. "Banking methods and principles — Credit and currency — Advantages of credit-supply of paper currency — Its relation to the standard coin — Discount rate — Deposits, how made — Minimum note denomination — Advantages and disadvantages of note-issue by the state"; 3. "Banking in India — Rural indebtedness — [The] coöperative movement — Life insurance — Cattle insurance — Savings banks — Foreign-exchange banks — Bank failures, causes and cures — Federal Reserve"; 4. "Foreign exchange — Exchange banks [again] — Stock exchanges — Exchange par — Mint par — Exchange stability — Gold export and import points — Exchange between countries with different standards — Council bills — Exchange ratio — Reverse councils — Rupee-sterling link"; 5. "Prices — High prices, relation to quantity of money — Velocity of circulation — Volume of trade — Population and wants — Low prices, how related to over-production — Underconsumption — High tariffs — Maldistribution of gold, credit and currency-contraction — State grants and subsidies, artificial products — Causes peculiar to India — Ignorance of marketing conditions — Currency and exchange ratio — Effects — Remedies"; 6. "Gold standard for India a factor for stabilization of world currencies and prices"; 7. "Public finance — Administration — State functions, 'necessary' and 'optional' — Costs by taxation — Principles and justification of taxation — Direct taxes — Land revenue — [The] 'Permanent Settlement' [of 1793] — Indirect

taxes — Exports and imports — Productive, protective and prohibitive duties — Anomalous taxes — A judicious apportionment — Readjustment of different items of expenditure — Military expenditure — National debt — Reasons — Remedies"; 8. "Conclusion." The book's strengths include neither data nor mathematical modelling.

—*Men of the other books in his library at the end of his life:*

K. T. Shah, *Sixty Years of Indian Finance* (1921) and *Public Services in India* (1935). The first of these two books was well-known in India. Shah was a barrister interested in financial matters and was the executive secretary of the National Planning Committee from which Kumarappa resigned in 1938.

Walter M. Horton, *A Psychological Approach to Theology* (New York 1931)

B. Das, *Salt Manufacture in Ancient Orissa* (Delhi 1931)

N. A. Jafri, *The History and Status of Landlords and Tenants in the United Provinces (India)* (Allahabad 1931)

B. K. Nadhan, *Some Aspects of Rural Economy in the Punjab (A Study of the Economics of a Punjab Village)* (Lahore 1934)

Malcolm L. Darling, *Wisdom and Waste in the Punjab Village* (Oxford 1934)

M. Viveshwaraya, *Planned Economy for India* (Bangalore 1934)

F. S. Kale, *Soya Bean. Its Value in Dietetics, Cultivation and Uses* (Baroda 1936)

Syed Mahmud, *A Plan for Provincial Reconstruction (as Illustrated by Bihar)* (Patna 1939)

Report of the Forest Administration in the Mysore State for the Twelve Months ending with 30th June 1938 (Bangalore 1939)

AN ESSAY BY KUMARAPPA* ON INDIA'S ECONOMY AS OF 1942

India presents such a bewildering variety of economic problems that it is not easy for one steeped in Western economics to appreciate Indian conditions, much less to understand the program put forward by national leaders. These variations from accepted formulas are largely due to the unique course of Indian history and the standard of values developed as part of its culture and religion. In this essay an attempt is made to explain Indian problems in the light of such a background, with special reference to the standard of living of the people.

I. The Standard of Life

Whatever may be the definition of the 'standard of life', it is generally accepted that the major part of the teeming millions of this country is hardly able to procure the mere necessities to eke out even an animal existence, and that there are few civilized countries with such a low standard.

Income per capita

Many attempts have been made to measure this situation by appraising the national income, and then from that to arrive at the per-capita income and then to compare the results obtained in other countries by a similar process. The latest estimate, *The National Income of British India*, is by Dr. V. K. R. V. Rao. His computation of the per-capita income is Rs. 62 per annum. However useful such calculations may be for certain academic purposes, the picture of conditions they unveil is thoroughly misleading as regards the real circumstances prevailing in rural parts. Naturally, the handicaps under which such calculations are made are many. The scarcity and unreliability of statistics available, the lack of uniformity of treatment, the vast range over which the average is struck, etc.,

* Published in 1942 (and again '43) by Oxford University Press on pp. 29-42 of "Oxford Pamphlets on Indian Affairs" No. 3, entitled "The Economic Background." An editorial preface explains:

"In this pamphlet the economic background to India's problems is surveyed from various points of view. Mr. K. T. Shah, General Secretary of the National Planning Committee (1939), emphasizes the necessity of viewing the background as a whole, the problems of agriculture, industry and currency being incapable of separate solution. Dr. P. J. Thomas argues that a perennial maldistribution and misuse of purchasing power is the cause of India's poverty and low standard of living and advocates a bold program of public works as the first step in a plan of national reconstruction. Mr. J. C. Kumarappa, the founder and secretary of the All-India Village Industries Association, seeks to develop a society of largely self-supporting rural units, within which the evil effects of competitive money-economy would be restrained. Sir Datar Singh, the administrator of a large estate in the Punjab, puts his faith in technical education; and Sir Jehangir Coyajee considers the place which India will occupy in the post-war world, and recurs to the necessity for a plan, flexible but all-embracing, as well as decades of strenuous exertion, in order to accelerate the rise of the standard of living."

vitate the conclusions to which one may be led by relying too much on such figures. A theoretical calculation of this type brings the income to about Rs. 5 a month. Even such an income is far too low to ensure a satisfactory balanced diet on a subsistence level, not to mention provision for clothing and shelter.

A more reliable and closer approximation to facts may be obtained by a survey of actual income in villages. An average struck from figures collected from over 50 villages of Matar Taluka by the present writer gives an income per capita of Rs. 14 per annum.¹ This taluka is in a comparatively prosperous part of Gujarat, which province itself is better-off than many other provinces of India.

Another way of getting a more accurate picture of the income is to work up from actual expenses, as some of the income from agricultural communities is derived directly from the land and does not figure in terms of money. A calculation based on a survey of over 600 villages on the Central Provinces discloses a per-capita income of Rs. 12 per annum.² This amount will not cover even half the cost of a low subsistence diet. Therefore, assuming that all the income is used for obtaining food, the people have to remain half-fed at best.

Why it is Low

It is wrong to attribute low standards in India to the inculcation of ascetic ideals. People go half-starved, not because they desire to be slim but because they cannot get enough to eat. They have no purchasing power to make their demand effective. When the people are industrious and intelligent it is no argument to say that their production is low, or that they are inefficient. We have to look elsewhere for satisfactory reasons to explain why their productivity should be so low.

A person may be willing to work hard, and may be intelligent, but may have no opportunity to occupy himself gainfully, or if he does have employment it may not bring in an adequate return for his labor. The standard of living of an individual under such circumstances is bound to be low due to no fault of his. This appears to be the position in our country.

Lack of Opportunities

Even a cursory glance through the list of imports and exports will reveal the fact that the bulk of our imports are manufactured goods, and the exports are largely raw materials. The process of transforming a raw material into a manufactured article involves employment for the people. When we export raw materials we are creating unemployment for our people by depriving them of the opportunities of work. At the same time, when we import finished goods we employ foreign labor to the exclusion of our own. Applying this reasoning, our foreign trade is an open record of the transfer of our opportunities of employment to foreign countries.

How this is directed is a long story. No protection was afforded to struggling infant industries. Railway freight rates are designed so as to encourage the shipment of raw materials from the ports and the transport of finished goods to the interior. Heavy taxes and

1. *A Survey of Matar Taluka*, p. 70.

2. *Report of the Central Provinces Government Industrial Survey Committee*, Part I, Vol. 1, p. 6.

dues at the sources of raw materials, a bad policy in regard to communications, the building of roads and canals, etc., have discouraged the growth of industries. Hardly any research calculated to help the villagers' production has been carried on. Government expenditures have not patronized local production and have set wrong standards of efficiency, leading to large supplies for government departments being obtained from foreign countries. The educational system was not calculated to help young men to enter industries and commerce as entrepreneurs. It will not be possible within the space at our disposal to go into the details of these false steps, but the above enumeration indicates to the reader the methods which have deprived the people of their birthright. Added to these are the uncertainties of a countryside dependent on the vagaries of the monsoon for its agricultural operations. These fortuitous circumstances have produced the unemployment and underemployment of the people, thus lowering their income.

Unremunerative Stages

The return that a manufacturer obtains at the various stages in the course of processing raw material into the finished product varies. In the earlier stages—near the raw material—the return is small, and as the article reaches the consumption stage the gain increases. If all these stages take place in one and the same country, the income of the country, as a whole, will not be affected. The distribution of wealth may not be uniform, but will adjust and level itself in time. If, on the other hand, these various stages are so separated by political boundaries that the badly-paying earlier stages are in one country and the more remunerative later stages are in another country, without the possibility of settling down to a common level, then we have watertight compartments in which the country undertaking the earlier process of manufacture has to be content with a lower income than the country where the finished goods are produced.

For instance, let us examine a chain of producers working on the basis of cottage units, manufacturing hair-oil from groundnuts [peanuts]. If a farmer with about four acres of cultivable land, which is more than an average holding in India, produces Rs. 100 worth of groundnuts at a cost of Rs. 70 for seeds and land operations, taking five months for the crop, the farmer's income will be Rs. 30. If he is fortunate enough to raise another crop during the year, of wheat, he will have a net income of say Rs. 50 from it. These gains, totaling Rs. 80, will represent his annual income.

If an oil-processor takes Rs. 100 worth of groundnuts and presses out oil, the operation will take him about a month, during which period the upkeep of his bullocks will cost Rs. 10, and he will obtain as a product Rs. 125 worth of oil and Rs. 25 worth of oil-cake. Thus he gets an income of Rs. 40 a month. Where adequate finances are forthcoming to enable the oil-presser to stock sufficient groundnuts for crushing during the whole year he can secure an income of Rs. 500 per year at this rate.

The hair-oil manufacturer can convert this Rs. 125 worth of groundnut oil into scented hair-oil, at a cost of about Rs. 245 for deodorizing, scenting and bottling, in about a month, yielding Rs. 500 worth of such scented oil. This will give him an income of Rs. 130 per month, and with the necessary capital he can get employment throughout the year, netting an income of about Rs. 1,500 annually.

The facts stated above show that owing to the vagaries of the monsoon and the nature of his calling the farmer gets only Rs. 80 per year, while the oil-presser, if he can command sufficient finances, can manage to occupy himself *throughout the year* and obtain an income of Rs. 500 a year; similarly, the manufacturer of hair-oils may gain Rs. 1,500

per year. We notice that as the process comes nearer the consumption stage, more capital but less personal labor is needed. This aspect will be even more accentuated if centralized methods are resorted to. As it is, to keep one hair-oil manufacturer engaged right through the year we need about a dozen farmers on the verge of starvation to supply the requisite oil-seeds. Even then, if all were in the same country, in course of time the varying incomes would adjust themselves within a limited range. But if the farmers were in India and the manufacturers in Germany this variation in the income of the different groups would never have the opportunity of readjustment but would lead to increasing divergence resulting in progressive poverty in the former country and accumulated riches in the latter—the raw-material producers being assigned in perpetuity to low-income-yielding occupations and the manufacturing, ruling nations reserving to themselves the more profitable avocations. Thus we see the reason for the competition amongst the nations to be the desire of the ruling race to hold the others in bondage as the raw-material producers for themselves. This is the basis of imperialism, which consigns the less remunerative task of producing raw materials to the subject races, and reserves the more remunerative functions to the rulers. This method of dividing the functions between nations is bound to consign the raw-material producing nations to an economic state of progressively increasing poverty which will ultimately result in the deterioration of the culture of those nations. In the course of the last century, with the growth of industrialization in Europe and America, India has slowly slipped into this lower order. Hence the low share she is getting out of the great wealth the human race is pouring out today. The problem is not one of production but one of a fair method of distributing the gains obtained.

Change in Demand

India is a country abounding in labor wealth. The people will only find a market for the exchange of their wealth when articles of consumption whose main costs are labor costs are in demand. With the growth of mechanized industries in the West and a drive towards labor-saving devices, the market was flooded with goods in which the labor cost was very low, the major part of the cost being for raw materials, transport, insurance, marketing and overhead charges. Thus the capitalists established themselves in the markets everywhere, while labor was ousted. In India, with a scarcity of capital and abundance of labor, this situation intensified unemployment and underemployment, when even such labor cost as entered into the cost of the manufactured articles came largely from foreign lands. The market for this labor has been much restricted by the advent of the products of centralized industries in the world markets and the cultivation of a philosophy of multiplicity of wants by the well-directed propaganda of vested interests. In India the satisfaction of wants so created has been directed by political control towards goods imported from abroad. In the absence of a market for the labor wealth of India the purchasing power of the masses has fallen low.

Money and Credit Economy

Our country has a large internal market for all kinds of goods. If this market had been properly husbanded and directed the people would have had a never-failing demand for their products. In the last century, the growth of money-economy with its monster-child 'credit' spread its tentacles so far and wide that our internal market has been totally disorganized and captured by foreign interests. For transferring purchasing power, money and credit are unsurpassed. An honest exchange does not consist in such transfers of

material values only, but should also include transfers of human and moral values.* These last two are not represented in a money transaction. The bargaining power of a seller of perishable bananas or fish is not on a par with that of the buyer, the holder of imperishable gold. The growth of money-exchange has smothered all considerations of equity and justice. As long as the buyer pays the price, nothing further need be said about the transaction. Under these conditions commerce can extend its markets to the uttermost corners of the world but cannot guarantee an equitable distribution of wealth and values. This unrestricted extension has resulted in the export of raw materials to distant industrial countries and imports of manufactured articles from such far-off manufacturers, with the consequent intensification of unremunerative production in our own land, as noticed in an earlier paragraph.

The old Indian system of distribution was a combination of money and barter exchange, where humane considerations had a place. Certain artisans, like the carpenter and blacksmith, and menials, like the barber and the sweeper, were guaranteed their subsistence by a payment in kind at the time of harvest in consideration for certain basic services to the community. This system, known as *baluta* or *puddi* or *dan*, is fast disappearing, leaving the former beneficiaries to starve out of existence in the competitive struggle of everyday life.

II. What is the Tendency?

Even if the income of the people was low, it would not be a matter for anxiety if the tendency over a long period was showing a steady rise. To be able to observe this tendency we have no adequate statistics prepared at periodical intervals on the same basis and principles. In the absence of such information we are, therefore, thrown back on the common-sense method of proving it. This method is perhaps the most reliable. An increase in the number of millionaires does not necessarily prove the country's prosperity. About 90 per cent of the population lives in villages, and so our inquiry should be directed toward assessing their financial conditions in the past and present, by actual examination of their assets and social customs. Such a change in their state is well reflected in (a) their houses, (b) their hoarding of gold or investment in ornaments and (c) the carry-over from their old customs.

The Evidence

(a) Houses and Buildings

Any observer who comes to take stock of the state of the dwelling-houses, public buildings, etc., in the villages will not be long before he notices that most of the substan-

* A late-20th century essay entitled "Edmund Wilson in Benares" includes the following citation from that noted American literary critic:

"Flaubert's novel plants deep in our mind an idea which we never get rid of: the suspicion that our middle-class society of manufacturers, businessmen, and bankers, of people who live on or deal in investments, so far from being redeemed by its culture, has ended by cheapening and invalidating all the departments of culture, political, scientific, artistic, and religious, as well as corrupting and weakening the ordinary human relations: love, friendship, and loyalty to cause — till the whole civilization seems to dwindle." (MWB, 221)

tial buildings are old ones, in bad repair, and that there are hardly any new ones of an ostentatious and ornate type. This reveals that the people were sufficiently well-off forty or fifty years ago to be able to spend money on such buildings; whereas the descendants of those same people are content now to live in the dilapidated ruins of the dwellings their forefathers had erected. The financial state of the present generation does not allow even a sufficient margin to keep these buildings in repair.

There are few public buildings, such as temples and schools, which are of recent origin. People have not had the wherewithal to donate such gifts. This is an unmistakable record of the weakening of the financial resources of the people.

(b) Ornaments

Whatever the habits of the urban people in regard to commercial investments may be, the savings bank of the rural population still remains the hoarding of gold, or investment in ornaments. Today the village goldsmith is a rarity. Such as still exist sit before the dead embers of their smithy fires to tell a tale of woe as to how, within their lifetime, they have lost their profession. This fall in the prosperity of the goldsmiths is an indicator of the decreased margins of savings amongst the people.

(c) Social Customs

A customary wail against the budget of the villager is that the expenses on social occasions are excessive. No doubt this is true if we take their present scale of income as the norm. This high proportion of social expenses is itself a proof that their income, which was high enough at one time to allow of such expenditures, has now dwindled, making the ratios between the various items on the budget unreasonable. If a man's income is Rs. 1,000 per annum, and he spends Rs. 100 on marriages, etc., nobody need take up the cudgels against him for extravagance. When the income of the son of such a well-to-do person falls to Rs. 300 per annum, and he still continues to spend the same amount of Rs. 100 on social occasions, he will certainly be open to charges of extravagance. Social customs the world over are very tenacious. People in all lands, even though willing to forego items on the menu, will cling on to the standards of social expenditures set up by their forefathers. The lag of this item in adjusting itself to decreasing income has created this so-often-criticized disproportion, and provides valuable evidence that the income of the villagers is steadily falling.

The above three items represent an indelible record written with the miseries of a people whose income has shrunk from opulence to poverty below subsistence level.

Competition with the Beasts of Burden

Apart from these long-term evidences we notice that there is a growing tendency for men to compete for the work hitherto done by animals, so that they may earn a meal somehow. Bullock-drawn vehicles are now being replaced by man-power, and horse-tongas by rickshaws. Can these be the signs of prosperity? Indeed the masses have sunk to dire poverty where they would 'fain fill their bellies with the husks that the swine did eat'.

We cannot be blindfolded by the seeming prosperity evidenced by new buildings rapidly rising in suburban areas, nor by the increase in the capital drawn from Indians for

working a few industrial concerns, nor by the luxurious lives of city-dwellers. India lives in the villages, and the evidence as to the prosperity or poverty of India has to be sought in the villages.

III. Industrialization

Centralized industries accumulate wealth but distribute it badly. Therefore their proper place is for the exploitation of natural resources on a service basis for the benefit of the producers working decentralized units. For example, we can use centralized units for mining and converting iron ore, [and] for rolling steel bars and sheets, but not for making cart-wheels, which latter is the work of the village wheelwright.

On a Service Basis

As such industries need considerable governmental aid in regimenting labor, maintenance of communications, provision of exchange, and control of tariffs they are best carried on by the Government on a service basis. All public utilities, power production, transport, etc., can be run with great advantage on this basis. Centralized industries must function as an accessory to the industries carried on by the people on a decentralized basis.

Labor Costs

As we have already mentioned, the labor cost in such industries is low, hence in India they cannot make full use of the labor wealth we possess by industrialization. If we wish to create a market for our plentiful supply of labor we can only do so by decentralized industries. We have to be very sparing in the use of centralized units in our country.

IV. [Proposed] Ameliorative Measures

The above discussion in itself contains indications of the ways in which reorganization can take place so as to increase the wealth of the people, and attention is drawn to some of the items below.

The state should manage forests so as to supply the artisans with the material they need when and how they want it. If the carpenter needs timber, the forests should be so planned as to produce the quality and kind of wood, properly seasoned, at the place where it is wanted.

The mineral wealth of the country should be worked by the state, not for export purposes, but for providing raw materials to be worked up in the vicinity into finished products. As we have already pointed out, trade in raw materials does not bring the highest returns to the people.

Railway rates, tariffs, etc., should be scheduled so as to encourage local manufactures on a cottage basis.

Facilities should be afforded by the state for research and experimentation for the improvement of tools, implements and processes, and an adequate medium should be provided for the dissemination of the information gained. Educational institutions where aspiring young men can equip themselves for production by means of cottage units need to be organized.

Foreign trade should be regulated by the state so as to encourage the export of surplus products and to furnish openings for the people seeking employment.

The evil effects of money-economy should be moderated by a judicious use of barter, and payment in kind. This will entail a certain amount of tax payments being received in kind by the state. Recently Gandhiji has thrown out a suggestion that handspun yarn should be accepted by certain organizations as medium of exchange.

In many industries, such as tanning, the length of time involved in the process of production calls for adequate financial facilities, without which the tendency to hasten the processes yields goods of inferior quality. Where such finance is called for, arrangements in the form of state aid, loans from regulated *makajans*, or coöperative help, should be forthcoming.

The measures indicated above are largely state functions, but they can also be carried out by private bodies working on an altruistic basis. The All-India Spinners' Association and the All-India Village Industries Association represent two such bodies attempting, in spite of all the handicaps of private effort, to reorganize the economic life of the great poverty-stricken masses of our land under the advice and guidance of Gandhiji. The reports of these institutions indicate the lines on which they have been working to achieve this end and, at the same time, to usher in a society based on mutual goodwill and understanding, the lack of which in our modern competitive world plunges us periodically headlong into wars of destruction, on a diabolical scale made possible by the advance in present-day methods of production.

WORKS CITED*

Abbreviation

- AAP* American Academy of Pediatrics Committee on Environmental Health, 1999 and later editions, *Pediatric Environmental Health*
- AER* *The American Economic Review* (journal founded in 1911, still current)
- AG* Geoffrey Ashe, 1968, *Gandhi* (New York)
- ALE* Jan Otto Andersson & Mattias Lindroth, 2001, "Ecologically Unsustainable Trade," in *Ecological Economics* XXXVII, 113-122
- ANB* John Arthur Garraty & Mark Christopher Carnes, ed., *American National Biography*, XXI (1999), 923-25: "Tugwell, Rexford Guy"
- ANC* Tony Aspromourgos, 1987, "'Neoclassical'," in John Eatwell, Murray Milgate & Peter Newman, ed., *The New Palgrave: A Dictionary of Economics* (London), III, 625
- AP* Aristotle, 4th century BCE, *Politics*
- APC* John S. Aird, 1982, "Population Studies and Population Policy in China," in *PDR* VIII, 85-97
- APD* Henry Carter Adams, 1887 and later editions, *Public Debts: An Essay on the Science of Finance* (New York)
- APF* Basil Ashton, Kenneth Hill, Alan Piazza & Robin Zeitz, 1984, "Famine in China, 1958-61," in *PDR* X, 613-645
- API* Bhimrao Ramji Ambedkar, 1925, *The Evolution of Provincial Finance in British India: A Study in the Provincial Decentralization of Imperial Finance* (London; reprinted in *AWS* VI, 51-324)
- APM* James Angresano, 1997, *The Political Economy of Gunnar Myrdal: An Institutional Basis for the Transformation Problem* (Edward Elgar, 8 Lansdown Place, Chryrenham GL50 2HU, England)
- ARA* Paul Avrich, 1967, *The Russian Anarchists* (Princeton)
- ARP* W. R. Aykroyd *et al.*, 1940, *The Rice Problem in India* (Calcutta)
- ASC* Kenneth Joseph Arrow, 1951 and later editions, *Social Choice and Individual Values*
- ATC* Claude Alvares, 1979 and later editions, *Decolonizing History: Technology and Culture in India, China and the West 1492 to the present day*

* I have cited different publications for different reasons: most often to show where evidence for an assertion of mine is to be found, sometimes to recommend a book or article, sometimes merely to point out its existence.

- AWS** Bhimrao Ramji Ambedkar, *Writings and Speeches* (16 vols., Bombay 1979-98)
- BA** Sam Dolgoff, ed., 1971, *Bakunin on Anarchy: Selected Works by the Activist-Founder of World Anarchism* (New York)
- BBF** Eric Brende, 2004, *Better Off: Flipping the Switch on Technology* (HarperCollins, New York)
- BBU** Ghanshyam Dass Birla, 1977, *Bapu: A Unique Association* (4 vols., Bombay)
- BC** *Bombay Chronicle*, 26 February 1952 issue
- BCE** George Bennett, ed., 1953 (2nd edition, 1962), *The Concept of Empire: Burke to Attlee 1774-1947* (London)
- BCH** A. L. Basham, ed., 1975 and later editions, *A Cultural History of India*
- BCL** Martin Browning & Thomas F. Crossley, 2001, "The Life-Cycle Model of Consumption and Saving," in *Journal of Economic Perspectives* XV/3, 3-22
- BCR** Mark Blaug, 1974 (2nd edition, 1975), *The Cambridge Revolution: Success or Failure?* (London)
- BDB** Michel Beaud & Gilles Dostaler, tr. V. Cauchemez, 1995, *Economic Thought Since Keynes: A History and Dictionary of Major Economists* (Aldershot UK and Brookfield VT)
- BDM** Cyril Edwin Black, 1966, *The Dynamics of Modernization: A Study in Comparative History* (New York)
- BDV** Piers Brendon, 2000 and 2001, *The Dark Valley: A Panorama of the 1930s* (London)
- BEE** Lester Russell Brown, 2001, *Eco-Economy: Building an Economy for the Earth* (Norton; this book can be downloaded, free of charge, from www.earth-policy.org)
- BEI** Kenneth Ewart Boulding & Tapan Mukerjee, 1972 and later editions, *Economic Imperialism: A Book of Readings* (Ann Arbor)
- BES** L. M. Bhole, 2000, *Essays on Gandhian Socio-Economic Thought* (Shipra Publications, 115-A Vikas Marg, Shakapur, New Delhi 110 092)
- BFI** Bal Mohand Bhatia, 1963 (and later editions), *Famines in India*
- BFP** Mario Augusto Bunge, 1996, *Finding Philosophy in Social Science* (New Haven CT)

- BGC** Charles Whiting Baker, 1921, *Government Control and Operation of Industry in Great Britain and the United States during the World War* (Oxford)
- BGE** Bepin Behari, 1963, *Gandhian Economic Philosophy* (Bombay)
- BGP** Judith Margaret Brown, 1989, *Gandhi: Prisoner of Hope* (New Haven CT)
- BGS** Sharon Beder, 1997/98, *Global Spin: The Corporate Assault on Environmentalism* (White River Junction VT and Totnes, Devonshire UK)
- BHE** Wilfrid Scawen Blunt, 1932 (and other editions, starting in 1907), *Secret History of the English Occupation of Egypt*
- BHF** Margaret Bourke-White, 1949, *Halfway to Freedom: A Report on the New India in ... Words and Photographs* (New York)
- BIE** Kenneth Ewart Boulding *et al.*, 1957, "Institutional Economics: A New Look at Institutionalism" and critical discussion by five of Boulding's colleagues, in *AER* XLVII, 1-27
- BIF** an anonymous "British Indian," 1932, *Finance and Commerce in Federal India* (Oxford)
- BIM** S. A. R. Bilgrami, 2000, "Economics and Islamic Economics: Some Reflections on Assimilation and Dissimilation," in *Islam and the Modern Age* XXXI/3, 73-78
- BIR** Wilfrid Scawen Blunt, 1909, *India under Ripon* (London and Leipzig)
- BIS** Mario Augusto Bunge, 1993, reply, in *Skeptical Inquirer* XVII, 217, to two academic economists' comments on a sentence in an article by him (see *Skeptical Inquirer* XVI, 378)
- BJM** Sugata Bose & Ayesha Jalal, 1997, *Modern South Asia: History, Culture, Political Economy* (New Delhi, Oxford Univ. Press; 2nd edition, Routledge, 1998)
- BLE** Wendell Berry, 2001, "The Idea of a Local Economy," in his *In the Presence of Fear: Three Essays for a Changed World* (see www.orionsociety.org), in *Orion* XX/1, 28-37, and in *Harper's Magazine*, April 2002, 15-20
- BLL** Charles Booth, 1886 and many later editions, *Life and Labor of the People of London*
- BLS** Evelyn Barbara Balfour, 1943 and later editions, *The Living Soil: Evidence of the Importance to Human Health of Soil Vitality, with Special Reference to Post-War Planning* (Faber & Faber)

- BMC** Adolf Augustus Berle Jr. & Gardner Colt Means, 1932 and later editions, *The Modern Corporation and Private Property*
- BMI** Judith Margaret Brown, 1994, *Modern India: The Origins of an Asian Democracy* (2nd edition; Oxford)
- BMP** William Blake, 1804 and later editions, *Milton: A Poem in Two Books*
- BMR** R. D. Collison Black *et al.*, ed., 1973, *The Marginal Revolution in Economics: Interpretation and Evaluation* (Durham NC, USA)
- BMU** Jan Breman, 2004, *The Making and Unmaking of an Industrial Working Class* (Amsterdam Univ. Press; Oxford Univ. Press in New Delhi)
- BNE** Bill Bryson, 2003, *A Short History of Nearly Everything* (New York)
- BO** Michel Bakounine [Mikhail Aleksandrovich Bakunin], *Oeuvres* (6 vols., Paris, 1895-1913; and later editions)
- BPB** Charles Whiting Baker, 1931, *Pathways Back to Prosperity* (New York)
- BPI** Paul R. Brass, 1994, *The Politics of India Since Independence* (2nd edition; Cambridge UK)
- BPQ** Ashish Bose, 1998, "Population: The Quest for Stabilization," in *KII*, 314-335
- BRC** Paul Brooks, ed., 1972, *The House of Life: Rachel Carson at Work: With Selections from her Writings Published and Unpublished* (Boston)
- BRP** Lester Russell Brown, 2003, *Plan B: Rescuing a Planet under Stress and a Civilization in Trouble* (www.earth-policy.org)
- BRW** Karl Erich Born, 1970 and other editions, "Von der Reichsgründung bis zum ersten Weltkrieg," III, iii of *Von der französischen Revolution bis zum ersten Weltkrieg*, in Bruno Gebhardt, *Handbuch der deutschen Geschichte*, ed. Herbert Grundmann (Stuttgart)
- BSM** Ghanshyam Dass Birla, 1968, *In the Shadow of the Mahatma* (Bombay)
- BSW** Mark Blaug & Paul Sturges, ed., 1983, *Who's Who in Economics: A Biographical Dictionary of Major Economists 1700-1981* (Cambridge MA)
- BTC** John Brockman, 1995, *The Third Culture* (Simon & Schuster, New York)
- BTV** Mark Blaug, ed., 1992, *Thorstein Veblen (1857-1929)* (Edward Elgar Publishing Co., Old Post Road, Brookfield VT 05036)
- BWD** Hubert Blake, 1931, *World Disorder and Reconstruction* (London)
- BWL** Barbara Brandt, 1995, *Whole Life Economics: Revaluing Daily Life* (New Society Publishers, Box 189, Gabriola Island BC V0R 1X0, Canada)

- CE** Sydney John Chapman, 1913, *Elementary Economics* (London)
- CEE** Robert Henry Coase, 1994, *Essays on Economics and Economists* (Chicago)
- CES** Rachel Carson, 1955 and later editions, *The Edge of the Sea* (my references are to the 1961 edition)
- CGG** Sandeep Chauhan, 2001, *GATT to WTO: Gandhian Alternative to New International Economic Order* (Deep & Deep Publications, F-159 Rajouri Garden, New Delhi 110 027)
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- CGP** Michel Chossudovsky, 1997 and later editions, *The Globalization of Poverty: Impacts of IMF and World Bank Reforms*
- CHP** Murat Çizakça, 2000, *A History of Philanthropic Foundations: The Islamic World from the Seventh Century to the Present* (Istanbul, Bogaziçi University Press)
- CIE** Pramit Chauduri, 1979, *The Indian Economy: Poverty and Development* (New York)
- CIV** Planning Committee, Government of India, 2004, *Report of the Committee on INDIA VISION 2000* (New Delhi), "Summary and Overview," reprinted in *National Seminar On Globalisation: India—Emerging Economic Power. Background Material* (Dept. of Economics, Univ. of Delhi, PGDAV College), pp. 31-44
- CJE** *Cambridge Journal of Economics*, 1998, Vol. XXII/4 ("Special Issue on Veblenian Evolutionary Economics")
- CLP** Warren B. Catlin, 1926, *The Labor Problem in the United States and Great Britain* (A 2nd edition also published, in 1936.)
- CLT** *A Companion to the Lord's Table: Meditation and Prayers from Ancient and Modern Authors* (undated, late-19th- or early-20th century; Religious Tract Society, London)
- CML** Amit Chauduri, ed., 2001, *The Picador Book of Modern Indian Literature* (London)
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- CPC** Ansley J. Coale, 1981, "Population Trends, Population Policy and Population Studies in China," in *PDR VII*, 267-297

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- CRG Yogesh Chadha, 1997, *Rediscovering Gandhi* (London; = *Gandhi: A Life*, New York)
- CRS Edwin Chadwick, 1843, *Report on the Sanitary Condition of the Labouring Population of Great Britain* (London)
- CSA Rachel Carson, 1951 and later editions, *The Sea Around Us*
- CSE Allan Carlson, 1990, *The Swedish Experiment in Family Politics: The Myrdals and the Interwar Population Crisis* (New Brunswick NJ)
- CSH anonymous, 1547, *Certain Sermons, or Homilies...* (London)
- CSÖ Hans Carl von Carlowitz, 1713, *Selvicultura Oeconomica* (Leipzig)
- CSS Rachel Carson, 1962 and later editions, *Silent Spring*
- DAG Sushil Dey, ca.1960, "Affluence and Growth," in the journal, *Quest*; anthologized in Abu Sayeed Ayyub and Amlan Datta, ed., *Ten Years of Quest* (Bombay, 1966), 115-128
- DAT Amlan Datta, 1970, "Aspects of Gandhian Thought," in *RGI*
- DAW Charles Darwin, 1881 and later editions, *The Formation of Vegetable Mould Through the Action of Worms*
- DDP Meghnad Desai, 1988, "Development Perspectives: Was There an Alternative to Mahalanobis?", in Isher Judge Ahluwalia & Ian Malcolm Little, ed., *India's Economic Reforms and Development* (Oxford Univ. Press, New Delhi)
- DEA Joseph Dorfman, 1946-59, *The Economic Mind in American Civilization, 1606-1933* (4 vols., New York)
- DEE Herbert Joseph Davenport, 1913 (2nd edition 1925), *The Economics of Enterprise* (New York)
- DEH Romesh Chander Dutt, 1902 (and later editions), *Economic History of British India, 1757-1837*
- DEM Herbert Joseph Davenport, 1935 (2nd edition 1965), *The Economics of Alfred Marshall*
- DER Partha S. Dasgupta, 1975 and later editions, *Exhaustible Resources and Economic Theory* (Cambridge)
- DET A. K. Dasgupta, 1985, *Epochs of Economic Theory* (Blackwell)

- DFG Amritananda Das, 1979, *Foundations of Gandhian Economics* (Allied Publishers, New Delhi)
- DGC Candulala Bhagubhai Dalal, 1971, *Gandhi: 1915-1948: A Detailed Chronology* (New Delhi)
- DGG Trimbak Raghunath Deogirikar, 1964, *Gopal Krishna Gokhale* (Delhi)
- DHE Jean-Paul Deléage, 1991, *Histoire de l'Écologie* (Paris)
- DIU Gurcharan Das, 2000, *India Unbound* (New Delhi, Penguin; republished 2001 in New York: see www.aaknopf.com)
- DIV Romesh Chunder Dutt, 1904 and later editions, *India in the Victorian Age*
- DLC John Patrick Diggins, 1999, *Thorstein Veblen: Theorist of the Leisure Class* (Princeton)
- DLE Romesh Diwan & Mark A. Lutz, ed. 1985, *Essays in Gandhian Economics* (Gandhi Peace Foundation, 221/223 Deen Dayal Upadhyaya Marg, New Delhi 110 002)
- DMF Raya Dunayevskaya, 1958 and later editions, *Marxism and Freedom*
- DOE Herbert Joseph Davenport, 1897 and later editions, *Outlines of Elementary Economics*
- DOT Herbert Joseph Davenport, 1896, *Outlines of Economic Theory* (New York)
- DPD Amlan Datta, 2003, keynote address, International Institute for Development Studies conference at Sanur (Bali)
- DPH Amlan Datta, 2002, *Paths to a Humane Society* (Radiance, Kolkata)
- DPI William Digby, 1901, *"Prosperous" British India: A Revelation from Official Records* (London)
- DRE Gerhard Dobbert, ed. 1932, *Red Economics* (London, Boston and New York)
- DRP Gaurav Datt and Martin Ravallion, 2002, "Is India's Growth Leaving the Poor Behind?", in *Journal of Economic Perspectives* XVI/3, 89-108
- DSM B. Das, 1931, *Salt Manufacture in Ancient Orissa* (New Delhi)
- DTV Douglas F. Dowd, 1966, *Thorstein Veblen* (New York)
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- DWE** Richard C. Duncan, 2001, "World Energy Production, Population Growth, and the Road to the Olduvai Gorge," in *Population and Environment: A Journal of Interdisciplinary Studies* XXII, 503-522
- DWW** Malcolm L. Darling, 1934, *Wisdom and Waste in the Punjab Village* (Oxford)
- EBR** Paul R. & Anne H. Ehrlich, 1996, *Betrayal of Science and Reason: How Anti-Environmental Rhetoric Threatens Our Future* (Washington)
- ECO** *Ecology* (journal founded in 1920 and still current; www.esa.com)
- ECI** *Ecological Indicators* (journal founded in 2000; www.elsevier.com)
- ECL** *Ecology Letters* (journal founded in 1998; Blackwell)
- ECS** *Ecosystems* (journal founded in 1998; www.springerlink)
- EE** *Ecological Economics* (journal, founded in 1989, of the International Society for Ecological Economics; available online since 1995; see www.elsevier.com)
- EEM** Ralf Erikson, 1997, *Essays in the Methodology and Ethics of Economics* (Åbo Akademi Univ. Press)
- EF** John Evelyn, 1661, *Fumifigium, or The Inconvenience of the Air and Smoke of London... With some Remedies humbly Proposed* (London)
- EKF** Leif Eriksson, 1993, *Krigets och Fredens Politiska Ekonomi* (diss., Dept. of Peace and Development Research, Göteborg Univ., Sweden)
- ELG** Erik P. Eckholm, ed., 1976, *Losing Ground: Environmental Stress and World Food Prospects* (New York)
- ELK** Friedrich Engels, 1845 and later editions, *Die Lage der arbeitenden Klasse in England*
- EMD** Amatai Ezioni, 1988, *The Moral Dimension: Toward a New Economics* (New York and London)
- EME** Paul R. Ehrlich, John P. Holdren & Richard W. Holm, ed., 1971, *Man and the Ecosphere: Readings from SCIENTIFIC AMERICAN* (San Francisco)
- EMP** Francis Ysidro Edgeworth, 1881 and later editions, *Mathematical Psychics: An Essay on the Application of Mathematics to the Moral Sciences*
- ES** John Evelyn, 1664 and later editions, *Sylva, or A Discourse of Forest-Trees, and the Propagation of Timber in His Majesty's Dominions*
- ETV** Stephen Edgell, 2001, *Veblen in Perspective: His Life and Thought* (Armonk NY)

- FAM** anonymous, 1939, *Report of the Forest Administration in the Mysore State for the Twelve Months ending with 30th June 1938* (Bangalore)
- FBE** John Fabb, 1986, *The British Empire from Photographs: India* (London)
- FCN** Daniel Johnson Fleming, 1923, *Contacts with Non-Christian Cultures...: A Case-Book in the Christian Movement Abroad* (New York)
- FCU** Andre Gunder Frank, 1969, *Capitalism and Underdevelopment in Latin America: Historical Studies of Chile and Brazil* (2nd edition, New York and London)
- FDR** Kenneth Sydney Davis, 1985, *FDR: The New York Years 1928-1933* (New York)
- FEE** Fred Rogers Fairchild, Edgar Furniss & Norman Sydney Buck, 1926 and later editions, *Elementary Economics*
- FGF** Ernst Fehr & Simon Gächter, 2000, "Fairness and Retaliation: The Economics of Reciprocity," in *Journal of Economic Perspectives* XIV/3, 159-181
- FGL** Louis Fischer, 1954 and later editions, *Gandhi: His Life and Message for the World* (New York; the first "Signet Mentor" paperback; not to be confused with FLG)
- FHS** J. G. Field, Gotthilf Hempel & C. P. Summerhayes, ed., 2002, *Oceans 2020: Science, Trends, and the Challenge of Sustainability* (Island Press, Washington DC)
- FKP** Karl N. Fraas, 1847, *Klima und Pflanzenwelt in der Zeit* (Landshut)
- FL** *Frontline* (an Indian weekly news-magazine), 6 November 1998 issue
- FLG** Louis Fischer, 1950 and later editions, *The Life of Mahatma Gandhi*
- FME** John Bellamy Foster, 2000, *Marx's Ecology: Materialism and Nature* (New York)
- FMH** anonymous Freemason, 1916, *By-laws of Lodge "Holmsdale in the East" of Mark Master Masons, Bombay*
- FMJ** John Bellamy Foster, 2002, "Marx's Ecology in Historical Perspective," *International Socialism: A Quarterly Journal for Socialist Theory*, 2nd series, XCVI, 71-86; available on the internet at pubs.socialistreviewindex.org.uk/isj96/foster.htm
- FMP** anonymous Freemason, early 20th century, *The Perfect Ceremonies of Craft Masonry (With the Initiation Ceremony)*
- FMR** anonymous Freemason, early 20th century, *Craft Ritual*

- FMS* anonymous Freemason, 1919, *By-laws of Lodge "Eastern Star," Bombay*
- FMU* anonymous Freemason, 1919, *Constitution of the United Grand Lodge of England*
- FSC* John King Fairbank, 1948 and later editions, *The United States and China* (Harvard; my references are to the 1983 edition)
- GAG* Gora (=Gopuraju Ramachandra Rao), 1951 and later editions, *An Atheist with Gandhi* (Navajivan; Ahmedabad)
- GAM* Ramachandra Guha, 2001, "The Green Gandhian: J. C. Kumarappa," in Guha's *An Anthropolgist Among the Marxists and Other Essays* (New Delhi; distributed by Orient Longman), 81-86
- GCM* Burton L. Goddard et al., 1967, *The Encyclopedia of Modern Christian Missions* (Camden NJ)
- GCP* Mahatma Gandhi, 1944, 2nd edition 1945 and later reprints, *Constructive Programme: Its Meaning and Place* (Ahmedabad)
- GCT* Allan G. Gruchy, 1972, *Contemporary Economic Thought: The Contribution of Neo-Institutional Economics* (Clifton NJ)
- GCR* Patrick Geddes, 1915 and later editions, *Cities in Evolution*
- GCW* *The Collected Works of Mahatma Gandhi* (New Delhi, 100 vols., 1958-1994)*
- GEF* M. L. Gujral, 1979, *Economic Failures of Nehru and Indira Gandhi* (New Delhi)
- GEN* anonymous, first millenium BC, the "Book of Genesis" in the Bible
- GEP* Shanti Swarup Gupta, 1994, *Economic Philosophy of Mahatma Gandhi* (Concept Publishing Co., New Delhi)
- GFC* Jean Grossholtz, 1984, *Forging Capitalist Patriarchy: The Economic and Social Transformation of Feudal Sri Lanka and Its Impact on Women* (Duke Univ. Press, Durham NC)
- GIS* Sibnarayan Ray, ed., 1970, *Gandhi, India and the World: An International Symposium* (Bombay)
- GM* *Gandhi Marg* (journal founded in 1957 and still current)

* There is a later, CD edition, with different volume- and page-numbers. It has some material not in the printed edition, but is less carefully edited. An improved version is said to be forthcoming.

- GMT* Allan G. Gruchy, 1947, *Modern Economic Thought: The American Contribution* (New York)
- GNO* Silvio Gesell, 1929, *The Natural Economic Order* (Berlin)
- GNI* Anurag Gangal, 1985, *New International Economic Order: A Gandhian Perspective* (Chanakya Publications, New Delhi)
- GNS* John Kenneth Galbraith, 1967 and later editions, *The New Industrial State*
- GPE* Laurie Garrett, 1994 and later editions, *The Coming Plague: Newly Emerging Diseases in a World Out of Balance*
- GPD* Gora, 1970, *Partyless Democracy* (Vijayawada)
- GPI* Ramachandra Guha, 1992, "Prehistory of Indian Environmentalism: Intellectual Traditions," in *Economic and Political Weekly*, XXVIII.
- GPP* Dhananjaya Ramchandra Gadgil, 1961, *Planning and Economic Policy in India* (Poona)
- GSI* Kathleen Gough & Hari P. Sharma, ed., 1973, *Imperialism and Revolution in South Asia* (New York and London)
- GSP* Birenda Nath Ganguli, 1973, *Gandhi's Social Philosophy: Perspective and Relevance* (2nd edition, 2000, National Gandhi Museum, New Delhi; <gandhimk@nda.vsnl.net.in>)
- GSW* Shriman Narayan [Agarwal], ed., 1968, *Mahatma Gandhi, Selected Works* (Ahmedabad)
- GUP* J. C. Kumarappa & Bharatan Kumarappa, ed., 1938-1956, *Gram Udyog Patrika*, "Monthly Organ of the All-India Village Industries Association" (my references are to the anthology published at Madras in 1971)
- GUS* John Kenneth Galbraith, 1958 and later editions, *The Affluent Society*
- HA* *Harijan*, fortnightly journal, 1933-1956 (with an interruption during World War II; edited by Mahatma Gandhi until his death in 1948)
- HAC* James Francis Horrabin, 1934 and later editions, *An Atlas of Current Events*
- HBG* Hazel Henderson, 1999, *Beyond Globalization: Shaping a Sustainable Global Economy* (West Hartford CT)
- HCA* Hazel Henderson, 1978, *Creating Alternative Futures: The End of Economics* (New York)
- HEE* Harold Hotelling, 1931, "The Economics of Exhaustible Resources," in *Journal of Political Economy* XXXIX, 137-175

- HEF** William Richey Hogg, 1952, *Ecumenical Foundations* (New York)
- HEI** William Edward Sladen Holland, 1927 (2nd edition), *The Indian Outlook: A Study in the Way of Service* (London)
- HEM** Frank Hahn, 1984, *Equilibrium and Macroeconomics* (Oxford)
- HES** Daniel Hillel, 1998, *Environmental Soil Physics* (San Diego CA)
- HFC** Friedrich August von Hayek, 1988 (2nd edition 1989), *The Fatal Conceit: The Errors of Socialism*
- HGM** Ernst Haeckel, 1866 and later editions, *Generelle Morphologie der Organismen*
- HGP** Sam Higgenbottom, 1929, *The Gospel and the Plow, or, The Old Gospel and Modern Farming in Ancient India* (New York)
- HH** Herodotus, 5th century BCE, *History*
- HIH** Frank Hahn, 1982, "Reflections on the Invisible Hand," in *Lloyds Bank Review*, April 1982, 1-21, reprinted in *HEM*.
- HIJ** Geoffrey M. Hodgson, 1998, the "Introduction" to *CJE* XXII/4 (an issue subtitled "Thorstein Veblen and Evolutionary Economics")
- HIS** Daniel M. Hausman, 1992, *The Inexact and Separate Science of Economics* (Cambridge Univ. Press)
- HJI** Stephen Northup Hay, 1970, "Jain Influences on Gandhi's Early Thought," in *RGI*, 29-38
- HLJ** Frederic W. Holmes, 1973, "Liebig, Justus von," in Charles Coulston Gillespie, ed., *Dictionary of Scientific Biography* (New York), VIII, 329-350
- HMC** Sandra Halperin, 1997, *In the Mirror of the Third World: Capitalist Development in Modern Europe* (Cornell Univ. Press)
- HNE** Steven C. Hackett, 2001 (2nd edition), *Environmental and Natural Resources Economies: Theory, Policy and the Sustainable Society* (M. E. Sharpe, Inc., 80 Business Park Drive, Armonk NY 10504)
- HOE** Daniel Hillel, 1991, *Out of the Earth: Civilization and the Life of the Soil* (London, New York and Toronto)
- HOG** James Francis Horrabin, 1923 and later editions, *An Outline of Economic Geography*
- HPP** Hazel Henderson, 1995, *Paradigms in Progress: Life Beyond Economics* (San Francisco)

- HPS** Hazel Henderson, 1981, *The Politics of the Solar Age: Alternatives to Economics* (New York)
- HPT** Walter M. Horton, 1931, *A Psychological Approach to Theology* (New York)
- HVW** Theinrod Heinsius, 1818-1822 and later editions, *Volkthümliches Wörterbuch der deutschen Sprache* (Hannover)
- IRM** *International Review of Missions* XLI (1952)
- JB** Ganesh Bhaskar Jathar & Shridhar Govind Beri, 1928-29 and later editions, *Indian Economics*
- JCQ** William Stanley Jevons, 1865 and later editions, *The Coal Question* (my references are to the 2nd edition, 1866)
- JCW** Jane Jacobs, 1984, *Cities and the Wealth of Nations: Principles of Economic Life* (New York)
- JDL** Jane Jacobs, 1961, *The Death and Life of Great American Cities* (New York)
- JDM** Jane Jacobs, 1992, *Systems of Survival: A Dialogue on the Moral Foundations of Commerce and Politics* (New York)
- JEC** Jane Jacobs, 1969, *The Economy of Cities* (New York)
- JEP** *Journal of Economic Perspectives* (current journal founded in 1987)
- JES** Prem Shankar Jha, 1980, *India: A Political Economy of Stagnation* (Bombay)
- JJD** *Jharkhand Journal of Development and Management Studies* (founded in 2002; see www.xiss.ac.in)
- JJU** James Jeans, 1929 and later editions, *The Universe Around Us*
- JJL** Harriet A Jevons, ed., 1886, *Letters and Journal of W. Stanley Jevons* (London)
- JLT** N. A. Jafri, 1931, *The History and Status of Landlords and Tenants in the United Provinces (India)* (Allahabad)
- JNE** Jane Jacobs, 2000, *The Nature of Economies* (New York)
- JOS** Prem Shankar Jha, 1998, article on Amartya Sen in *Outlook* (an Indian weekly news magazine; 26 November issue)
- JPC** Jayaprakash Narayan, 1935, "Centralization versus Decentralization: Rejoinder to Mr. Kumarappa," in *The Searchlight*, 5-12 May. Repub-

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- JSS** Lars Jonung, ed., 1991, *The Stockholm School of Economics Revisited* (Cambridge UK)
- JTV** Elizabeth W. & Henry I. Jorgensen, 1999, *Thorstein Veblen: Victorian Firebrand* (Armonk, NY)
- JWR** Graham Vernon Jacks & Robert Orr Whyte, 1939, *The Rape of the Earth: A World Survey of Soil Erosion* (London; published the same year in New York as *Soil Erosion: A World Survey of Vanishing Lands*)
- KA** Kautilya (presumably) *et al.*, ca.300-100 BCE, the *Arthashastra*
- KAL** Dhananjay Keer, 1962, *Dr. Ambedkar: Life and Mission* (2nd edition, Bombay)
- KAM** J. C. Kumarappa, 1952, "Arthik Samata Mandal," typescript* for *GUP*
- KAR** J. C. Kumarappa *et al.*, 1949, *Report of the Agrarian Reforms Committee* (New Delhi)
- KAM** J. C. Kumarappa, 1952, "Arthik Samata Mandal," typescript* for *GUP*
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- KBA** J. C. Kumarappa, late 1930s, "Barter in Action," offprint* from *M. J. V. Silver Jubilee*, 20-22
- KBM** J. C. Kumarappa, 1948, *Blood Money* (Wardha)
- KBO** Michael T. Klare, 2004, *Blood and Oil: The Dangers and Consequences of America's Growing Petroleum Dependency* (Metropolitan Books, New York)
- KBW** J. C. Kumarappa, 1948, *Banishing War* (Wardha)
- KCB** Pyotr Kropotkin, 1892 and later editions, *La Conquête du pain* (English translation, *The Conquest of Bread*)
- KCC** J. C. Kumarappa, 1935, "Communism and the Common People," typescript* for *The Student's Outlook*, Allahabad Univ., 17 November issue

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- KCP** J. C. Kumarappa, 1952, "Community Projects," typescript*
- KCS** Bharatan Kumarappa, 1946, *Capitalism, Socialism or Villagism?* (Madras)
- KDE** Steve Keen, 2001, *Debunking Economics: The Naked Emperor of the Social Sciences* (London; www.zedbooks.demon.co.uk)
- KEB** John Maynard Keynes, 1933 (and later editions), *Essays in Biography*
- KEG** J. C. Kumarappa, 1948, *Europe through Gandhian Eyes* (Wardha)
- KEM** Joel Kovel, 2002, *The Enemy of Nature: The End of Capitalism or the End of the World?* (Halifax, Canada)
- KEP** J. C. Kumarappa, 1945 and later editions, *Economy of Permanence* (not to be confused with *SEP*; my references are to the 6th edition, 1997)
- KES** Douglas A. Kysar, 2003, "Some Realism about Environmental Skepticism: The Implications of Bjorn Lomborg's *The Skeptical Environmentalist* for Environmental Law and Policy," in *Environmental Law Quarterly* XXX, 224-278
- KET** J. C. Kumarappa, 1942, "Economics of Permanence," typescript* (not to be confused with *KEP* or *SEP*)
- KEW** J. C. Kumarappa, "Economics as a Way of Life," typescript*
- KFP** J. C. Kumarappa, 1949, *Our Food Problem* (Wardha)
- KGA** Vishwas B. Kher, ed., 1957, *Mahatma Gandhi, Economic and Industrial Life and Relations* (3 vols., Ahmedabad)
- KGB** J. C. Kumarappa, 1931, "A Seer amongst Economists," typescript* for the "Gandhi Birthday Number" (October) of *Bombay Chronicle*
- KGD** J. C. Kumarappa, 1945, *Guidelines for Rural Economic Development* (Wardha)
- KGI** Timur Kuran, 1997, "The Genesis of Islamic Economics: A Chapter in the Politics of Muslim Identity," in *Social Research* LXIV/2
- KGM** Immanuel Kant, 1785 and later editions, *Grundlagen zur Metaphysik der Sitten*
- KGT** J. C. Kumarappa, 1951, *Gandhian Economic Thought*

- KI J. C. Kumarappa, 1946 or '47, typescript* of an interview of him by Dr. A. M. Natesh in Mysore
- KIE V. G. Kale, ca.1925-30, *Indian Economics* (Pune)
- KII Hiranmay Karlekar, ed., 1998, *Independent India: The First Fifty Years* (Indian Council for Cultural Relations and Oxford Univ. Press, Delhi)
- KIR Keshav & Iyengar, ca.1925-30, *Studies in Rural Economics* (King)
- KKV J. C. Kumarappa, 1936, *Khadi and Village Industries Exhibition* (Lucknow)
- KMM Clark Kerr, 1969, *Marshall, Marx and Modern Times* (Cambridge UK)
- KN J. C. Kumarappa, 1930, "Nationalism" (Bombay; reprinted from the journal, *Indian Social Reformer*)
- KND Satish Kumar (born 1936), 1992, *No Destination: An Autobiography* (Bideford UK, Resurgence; 2nd ed., entitled *Path Without Destination: An Autobiography*, New York, 1999)
- KNL J. C. Kumarappa, 1950s, correspondence* with Jawaharlal Nehru
- KNW J. C. Kumarappa, 1941, "The Non-violent Way," typescript* for the July issue of *Rural India*
- KOA J. C. Kumarappa, 1934, *The Organisation and Accounts of Relief Work* (2nd edition, Wardha, 1947)
- KOP J. C. Kumarappa, 1946 and later editions, *An Overall Plan for Rural Development*
- KPA J. C. Kumarappa, 1948, *Peace and Prosperity* (Wardha)
- KPC J. C. Kumarappa, 1951, *People's China: What I Saw and Learnt There* (Wardha)
- KPD J. C. Kumarappa, ed., 1940, *A Plan for the Economic Development of North-West Frontier Province* (Wardha)
- KPE J. C. Kumarappa, 1949, *Present Economic Situation* (Wardha)
- KPF J. C. Kumarappa, 1930 and later editions, *Public Finance and Our Poverty*
- KPK J. C. Kumarappa, 1935, preface to *KCB*, typescript*

- KPÖ Karl Knies, 1853 and later editions, *Die Politische Ökonomie vom geschichtlichen Standpunkte*
- KPP J. C. Kumarappa, 1954, *Planning by the People for the People* (Bombay)
- KPR J. C. Kumarappa, 1946, "A Plan for Rural India," typescript* for a jubilee volume of the Indian National Congress
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- KRC J. C. Kumarappa, 1952 or '53, "Russia and China," typescript*
- KRD J. C. Kumarappa, 1956, "Report on Rural Development Work in Madurai District," typescript*
- KRI J. C. Kumarappa, ed., 1939, *Report of the Industrial Survey Committee of Central Province and Berar* (New Delhi)
- KRJ J. C. Kumarappa, 1952, *Report on Agriculture, Cottage and Small-Scale Industries in Japan* (New Delhi)
- KRV J. C. Kumarappa, somewhat before 1956, "Riverine Valley Planning," typescript*
- KRW Michael T. Klare, 2001, *Resource Wars: The New Landscape of Global Conflict* (Metropolitan Books, New York)
- KSB F. S. Kale, 1936, *Soya Bean: Its Value in Dietetics, Cultivation, and Uses* (Baroda)
- KSC Karl William Kapp, 1950 and later editions, *The Social Costs of Private Enterprise*
- KSI J. C. Kumarappa, 1946, *Stone Walls and Iron Bars* (Allahabad)
- KSM J. C. Kumarappa, 1948 *Swaraj for the Masses* (Wardha)
- KSP J. C. Kumarappa, 1949, *Science and Progress* (Wardha)
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- KTB J. C. Kumarappa, 1935, "The Task Before Us," typescript*
- KTE John Maynard Keynes, 1936 and later editions, *The General Theory of Employment, Interest and Money*
- KUB J. C. Kumarappa, 1951, *The Unitary Basis for a Non-Violent Democracy* (Wardha)
- KUS J. C. Kumarappa, 1952, letter* of 21 March to the American Embassy
- KVA J. C. Kumarappa, 1930s, "Violence in Economic Activity," typescript* for *Harijan*
- KVI J. C. Kumarappa, 1938, "Violence Essential to Industrialization," typescript* for *Aryan Path*
- KVW J. H. Kaltschmidt, 1851, *Vollständiges stamm- und sinnverwandtschaftliches Gesamt-Wörterbuch* (3rd edition)
- KWD Charles Poor Kindleberger, 1973 (2nd edition, 1986), *The World in Depression, 1929-1939* (London and Berkeley CA)
- KVM J. C. Kumarappa, 1936 and later editions, *Why the Village Movement?*
- KWI J. C. Kumarappa, 1936, "Women and Village Industries," typescript* summary of a speech given in June to the Mahila Seva Samaja [Women's Service Society] of Bangalore on 20 June
- KWV J. C. Kumarappa, 1947, *Women and Village Industries* (Wardha)
- LAM Harvey Leist Lutz, 1947, *The American Way* (New York)
- LCA Justus von Liebig, 1862, *Die Chemie in ihrer Anwendung auf Agricultur und Physiologie*, 7th edition (Brunswick; 2 vols.; my references are to the separately paginated 156-page "Einleitung in die Naturgesetze des Feldbauers" in the first volume)
- LCE Timothy W. Luke, 1999, *Capitalism, Democracy and Ecology: Departing from Marx* (Univ. of Illinois, Urbana)
- LEP S. Lakshminarasiah, 1935, *Indian Economic Problems, or The Way to Prosperity in the Light of Advanced Knowledge and Recent Experience* (Vizianagram)

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- LKC R. Lal, John Kimble, Elissa Levine & B. A. Stewart, ed., 1995, *Soils and Global Change* (Lewis Publishers; see www.crcpress.com)
- LKG R. Lal, John Kimble, Elissa Levine & B. A. Stewart, ed., 1995, *Soil Management and Greenhouse Effect* (Lewis; see www.crcpress.com)
- LLC Mark A. Lutz & Kenneth Lux, 1979, *The Challenge of Humanistic Economics* (Menlo Park CA)
- LTT John Locke, 1690 and later editions, *Two Treatises of Government*
- LHS John Lawrence & Barbara Hammond, 1919 and later editions, *The Skilled Labourer, 1760-1832*
- LGC Mark Lindley, 1999, *How Gandhi Came to Believe Caste Must Be Dismantled by Inter-marriage* (Centre for Gandhian Studies, Univ. of Kerala, Trivandrum 695 034, India; another version of this essay is available at www.sosyalbilimler.hacettepe.edu.tr/dergi/makale/20021mlindley.shtml)
- LCM Harold Joseph Laski, ed., 1948, *Communist Manifesto, Socialist Landmark: A New Appreciation Written for the Labor Party ... together with the Original Text and Prefaces* (London)
- LID Michael A. Lebowitz, 2004, "Ideology and Economic Development," in *Monthly Review* (see www.monthlyreview.org/0504lebowitz.htm)
- LPF Harley Leist Lutz, 1924 and later editions, *Public Finance* (New York)
- LRR Ernest Kidder Lindley, 1933 and later editions, *The Roosevelt Revolution: First Phase*
- LRV Derrick Leon, 1949, *Ruskin: The Great Victorian* (London)
- LSC Lev Abranovich Leontyev, 1968, *A Short Course in Political Economy* (Moscow)
- LSE Bjorn Lomborg, 1998, *Verdens Sande Tilstand* (Copenhagen; tr., mainly by Hugh Matthews, as *The Skeptical Environmentalist: Measuring the Real State of the World*, Cambridge UK, 2001); see also RMM and KES)
- MAE Juan Martinez-Alier, 1987 (2nd edition 1990), *Ecological Economics: Energy, Environment and Society* (Oxford)
- MAN Gunnar Myrdal, 1942, *An American Dilemma: The Negro Problem and Modern Democracy* (New York)

- MAP** Gunnar Myrdal, 1968, *Asian Drama: An Inquiry Into the Poverty of Nations* (3 vols.; New York)
- MAS** Raymond Moley, 1939, *After Seven Years* (New York)
- MBA** Ragavendra Bath Misra, 1972, *Bhoodan Movement in India: An Economic Assessment* (New Delhi)
- MAP** Gunnar Myrdal, 1970, *The Challenge of World Poverty: A World Anti-Poverty Program in Outline* (New York)
- MCS** Karl Marx, 1924 and later editions, *Class Struggles in France*, translated by Henry Kuhn from *Die Klassenkämpfe in Frankreich 1848 bis 1850...* (Berlin 1850, reprinted from the *Neue Rheinische Zeitung*)
- MDA** Anne Mayhew, 1998, "On the Difficulty of Evolutionary Economics," in *CJE*, 449-461.
- MDC** Mark Mazower, 1998, *Dark Continent. Europe's Twentieth Century* (London; 2nd edition, New York 1999)
- MDD** Vaikunth L. Mehta, 1964, *Decentralized Economic Development* (Bombay)
- MDE** John Stuart Mill, 1844 and later editions, "On the Definition of Political Economy," in his *Questions of Political Economy*
- MEC** Karl Marx and Friedrich Engels, *Collected Works* (49 vols. when I last looked; London and New York)
- MEM** Steven Marcus, 1974 (2nd edition, 1985), *Engels, Manchester, and the Working Class* (New York)
- MEP** Juan Martinez-Alier, 1987 2002, *The Environmentalism of the Poor: A Study of Ecological Conflicts and Valuation* (Edward Elgar Publishing, Glensanda House, Montpelier Parade, Cheltenham GL50 1UA, England)
- MET** Vadilal Lallubhai Mehta, 1977, *Equality through Trusteeship: An Alternative for Full Employment along Gandhian Lines* (Tata McGraw-Hill, New Delhi)
- MG** *The Gospel According to St. Matthew*
- MGA** Gunnar Myrdal, 1933, "Der Gleichgewichtsbegriff als Instrument in der geldtheoretischen Analyse," in Friedrich von Hayek, ed., *Beiträge zur Geldtheorie* (Vienna; this essay by Myrdal, originally in Swedish, was later published in English as *Monetary Equilibrium*)
- MGG** Anil Dutta Mishra, ed., 1999, *Gandhism after Gandhi* (New Delhi; <mittalp@ndf.vsnl.net.in>)

- MIC** Jagannath Swaroop Mathur, 1971, *Industrial Civilization and Gandhian Economics* (Allahabad)
- MIE** Sayyid Abu'l-A'la Mawdudi, 1941, English translation 1978, *The Economic Problem of Man and its Islamic Solution* (Lahore)
- MIP** Sayyid Abu'l-A'la Mawdudi, 1951, English translation 1981, "The Rudiments of Islamic Philosophy of Economics," in his *Selected Speeches and Writings* (Karachi), vol. I, 173-82
- MIT** Alfred Marshall, 1919 and later editions, *Industry and Trade* (my references are to the 4th edition (1923), the one read by Kumarappa)
- MK** Martin A. Miller, 1976, *Kropotkin* (Chicago)
- MLD** Harold Mann, 1917, *Life and Labour in a Deccan Village* (London and Bombay)
- MLE** Lionel Munby, ed., 1971, *The Luddites and Other Essays* (London)
- MLG** G. C. Muhkatyar, 1930, *Life and Labour in a South Gujarat Village* (Longmans Green)
- MMA** Jagannath Swaroop Mathur & A. S. Mathur, ed. 1962, *Economic Thought of Mahatma Gandhi* (Allahabad)
- MMS** Robert Morrison MacIver, 1926, *The Modern State* (Oxford and London)
- MGS** *The Gift of the Spirit: A Selection from the Essays of Prentice Mulford* (London 1917)
- MNW** Kenneth MacLennan, 1926, *The Cost of a New World* (New York)
- MOA** Gunnar Myrdal, 1973, address to the One-Asia Assembly, published (with various different titles) in *Khadi Gram Udyog* XIX, 381-87; in *The States IV*; *People's Action VII/3*; *Sarvodaya I/2*; and excerpts elsewhere
- MPE** Alfred Marshall, 1890 and later editions, *Principles of Economics* (my references are to the 1920 edition)
- MPR** Syed Mahmud, 1939, *A Plan for Provincial Reconstruction (as Illustrated by Bihar)* (Patna)
- MPS** Loyd David Easton & Kurt H. Guddat, ed., 1967 (2nd edition 1997), *Writings of the Young Marx on Philosophy and Society*
- MRC** Mary A. McKay, 1993, *Rachel Carson* (Twayne, New York)
- MRP** Gunnar Myrdal, 1957, *Rich Lands, Poor Lands* (New York)

- MSF** Michelle Burge McAlpin, 1983, *Subject to Famine: Food Crises and Economic Change in Western India, 1860-1920* (Princeton)
- MSH** William H. McNeill, 1974, *The Shape of European History* (New York)
- MSI** N. R. Malkani, 1960, "Whither Small-Scale Industries," in *A.I.C.C. Economic Review*, 22 August
- MU** John Stuart Mill, 1863 and later editions, *Utilitarianism*
- MUS** Gunnar Myrdal, 1975, "The Unity of the Social Sciences," address to the Society for Applied Anthropology (Amsterdam)
- MWB** Pankaj Mishra, 2000, "Edmund Wilson in Benares," in Robert B. Silvers and Barbara Epstein, ed., *India: A Mosaic* (New York; an anthology of essays from *The New York Review of Books*), 197-224
- MWP** Jane Menken, ed., 1986, *World Population and U.S. Policy: The Choices Ahead* (New York)
- MWS** T. H. Marshall, 1961, "The Welfare State—A Comparative Study," in *The European Journal of Sociology* II/2, republished in 1963 as Chapter 14 of *Sociology at the Crossroads* (London) and again in 1964 in *Class, Citizenship and Social Development* (New York)
- MWY** Jim MacNeill, Pieter Winsemius & Taizo Yakushiji, 1991, *Beyond Interdependence: The Meshing of the World's Economy and the Earth's Ecology* (New York)
- NBM** Sylvia Nasar, 1998, *A Beautiful Mind* (New York)
- NCS** Thomas A. Nakagawa & Edward C. Conway, Jr., 2004, "Shaken Baby Syndrome: Recognizing and Responding to a Lethal Danger," in *Contemporary Pediatrics* XXI/3 (March), 37-57
- NET** Jai Narain, 1991, *Economic Thought of Mahatma Gandhi* (New Delhi)
- NGF** Bal Ram Nanda, 1990 *In Gandhi's Footsteps: The Life and Times of Jamanlal Bajaj* (Delhi)
- NGP** Shriman Narayan [Agarwal], 1944, *The Gandhian Plan of Economic Development for India* (Bombay)
- NKB** K. R. Nanekar & S. V. Khandewale, 1973, *Bhoodan and the Landless* (Bombay)
- NMG** Bal Ram Nanda, 1958 and later editions, *Mahatma Gandhi: A Biography*
- NMN** Bal Ram Nanda, 1998 (2nd edition 1999), *The Making of a Nation: India's Road to Independence* (Delhi)

- NPI** Dadabhai Naoroji, 1901 and later editions, *Poverty and Un-British Rule in India*
- NPP** Shriman Narayan [Agarwal], 1960, *Principles of Gandhian Planning* (Allahabad)
- NRE** B. K. Nadhan, 1934, *Some Aspects of Rural Economy in the Punjab (A Study of the Economics of a Punjab Village)* (Lahore)
- NRG** Shriman Narayan [Agarwal], 1970, *Relevance of Gandhian Economics* (Ahmedabad)
- NRT** Michael V. Namorato, 1988, *Rexford G. Tugwell: A Biography* (New York)
- NSW** S. Gopal, ed., 1972-82, *Selected Works of Jawaharlal Nehru*, First Series (15 vols.; Orient Longman)
- NTP** Shriman Narayan [Agarwal], 1978, *Towards the Gandhian Plan* (New Delhi)
- OEB** Khushal Talaksi Shah, P. J. Thomas, J. C. Kumarappa *et al.*, 1942 (2nd edition 1943), *The Economic Background* (Oxford Univ. Press)
- OED** *The Oxford English Dictionary*
- OFE** Eugene Pleasants Odum, 1953 and later editions, *Fundamentals of Ecology*
- ÖGW** Oertel (a professor in Ansbach), 1829 and later editions, *Grammatisches Wörterbuch der deutschen Sprache*
- OLR** Denis Patrick O'Brien, 1988, *Lionel Robbins* (Basingstoke)
- OTA** T. K. Oommen, 1998, "Society: Tradition and Autonomy," in *KII*, 229-240
- PBF** Ehrenfried Pfeiffer, tr. F. Haeckel 1938, *Bio-dynamic Farming and Gardening: Soil Fertility, Renewal and Preservation* (New York)
- PDR** *Population and Development Review* (journal founded in 1975, still current)
- PE** Arthur Cecil Pigou, 1920 and later editions, *The Economics of Welfare* (my references are to the 1924 edition)
- PED** Gunanidhi Parida, 2000, *Ecology and Development in Conflict: A Gandhian Approach* (A.P.H. Publishing Corporation, 5 Ansari Road, Darya Ganj, New Delhi 110 002)

- PEH William N. Parker, ed., 1986, *Economic History and the Modern Economist* (Oxford)
- PEW *The Economic Writings of Sir William Petty*, ed. C. H. Hull (1899), 1
- PFC Gifford Pinchot, 1910 (2nd edition 1967), *The Fight for Conservation*
- PGA Y. A. Panditrao, 1992, *Gandhian Approach to Economic Development* (Bombay)
- PGE Badri Prasad Pandey, ed., 1991, *Gandhi and Economic Development* (New Delhi)
- PHP Vladimir Ivanovich Pavlov, 1978, *Historical Premises for India's Transition to Capitalism: Late 18th to Mid-19th Century* (Moscow)
- PID Anirudh Prasad, 2003, "Industrial Decentralization: A Case Study of Khadi and Village Industries in Jharkhand," in *JJD* 1/4, 505-528
- PIF André Philip, tr. C. G. Schlumberger, 1932 and later editions, *India: A Foreign View* (London)
- PLJ Nilam Parikh, tr. K. Palkhiwala 2001, *Gandhi's Lost Jewel: Harilal Gandhi* (National Gandhi Museum, New Delhi 100 002)
- PLP Pyarelal, 1956 (2nd edition, 1965), *Mahatma Gandhi, The Last Phase* (many libraries have only one edition, so I give references to both)
- PMM Arthur Cecil Pigou, ed., 1925, *Memorials of Alfred Marshall* (London)
- PMO Daniel Pauly & J. L. Maclean, 2003, *In a Perfect Ocean: The State of Fisheries and Ecosystems in the North Atlantic Ocean* (Island Press, Washington DC)
- PNA Michael Perelman, 2003, "Marx's Initial Anti-Malthusianism," at archives.econ.utah.edu/archives/marxism/2003w01/msg00266.htm
- PPF J. S. Poonia, 1920s or early '30s, *Principles of Public Finance* (Madras)
- PSF Ehrenfried Pfeiffer, 1947, *Soil Fertility, Renewal and Preservation: Bio-dynamic Farming and Gardening* (London; a revised version of *PBF*)
- PSU Serhii Podolinsky, 1880, "Le socialisme e l'unité des forcees fisiques," in *Revue Socialiste*, June (and versions of the same article in Russian, Italian and German: see *MAE*, 1987 edition, 61 and 227)
- PTD Colin Price, 1993, *Time, Discounting and Value* (Blackwell)
- PTL Robert Goodland, Herman E. Daly & Salah El Serafy, ed., 1992, *Population, Technology and Lifestyle: The Transition to Sustainability* (Island Press, Suite 300, 1718 Conn. Ave. NW, Washington DC 20009)

- PWD Paul R. Portney & John P. Weyant, ed., 1999, *Discounting and Inter-generational Equity* (Washington)
- RAC Joan Violet Robinson, 1956, *The Accumulation of Capital* (London)
- RBW Anonymous, 1975, "A Socialist who sounds like a Conservative," in *Business Week* (October 20 issue)
- RCP Joan Violet Robinson, 1975-80, *Collected Papers* (4 vols. plus a "General Index" volume; Blackwell, Oxford)
- REC Joan Violet Robinson, 1933 and later editions, *The Economics of Imperfect Competition*
- REG Walt Whitman Rostow, 1952 and later editions, *The Process of Economic Growth* (the 3rd edition is entitled "The Stages of Economic Growth: A Non-Communist Manifesto")
- REH Dietmar Rothermund, 1993 (2nd edition), *An Economic History of India from Pre-colonial Times to 1991* (Routledge; London and New York)
- REI Tirthankar Roy, 2000, *The Economic History of India, 1857-1947* (Delhi)
- REL Nicholas Georgescu-Roegen, 1971, *The Entropy Law and the Economic Process* (Harvard Univ. Press, Cambridge MA)
- REP Jawaharlal Nehru *et al.*, 1948, *Report of the Economic Programme Committee* (New Delhi)
- RES Emma Rothschild, 2001, *Economic Sentiments: Adam Smith, Condorcet, and the Enlightenment* (Harvard Univ. Press, Cambridge MA)
- RFW James Robertson, 1990, *Future Wealth: A New Economics for the Twenty-first Century* (Cassell, London)
- RGB Andrew Rowell, 1996, *Green Backlash: Global Subversion of the Environmental Movement* (Routledge)
- RGC Romain Rolland and *Gandhi Correspondence* (Publications Division, Ministry of Information and Broadcasting, Govt. of India, 1976)
- RGI Sibnarayan Ray, ed., 1970, *Gandhi, India, and the World* (Melbourne)
- RGR John D. Rosenberg, ed., 1964 (and later editions), *The Genius of John Ruskin: Selections from his Writings*
- RGS Radhey Mohan, ed., 1982, *Gandhian Economic System: A Necessity or Utopia?* (Vichar, New Delhi)
- RHC Cynthia Rosenzweig & Daniel Hillel, 1998, *Climate Change and the Global Harvest. Potential Impacts of the Greenhouse Effect on Agriculture* (Oxford Univ. Press, New York)

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- RIC** Lionel Charles Robbins, 1938, "Interpersonal Comparisons of Utility: A Comment," in *The Economic Journal* XLVIII, 635-641 (a note to *RNS*)
- RIE** Malcolm Rutherford, 1994 (2nd edition, 1996) *Institutions in Economics: The Old and the New Institutionalism* (Cambridge UK)
- RIS** Baren Ray, 1983, *India: Nature of Society and Present Crisis* (Intellectual Book Corner, New Delhi 110 002)
- RLD** Lionel Charles Robbins, 1938, "Live and Dead Issues in the Methodology of Economics," in *Economica*, New Series, V/19, 342-352
- RLT** Dietmar Rothermund, "Government, Landlord and Tenant in India, 1875-1900," in his *The Phases of Indian Nationalism and Other Essays* (1970)
- RMG** Dietmar Rothermund, 1991 (reissued 1998), *Mahatma Gandhi: An Essay in Political Biography* (New Delhi)
- RMM** John Rennie, Stephen Schneider, John P. Holdren, John Bongaarts & Thomas Lovejoy, 2002, "Misleading Math about the Earth," in *Scientific American* cclxxxvi/1 (January 2002), 61-71 (see also, in the same journal, cclxxxvi/5 (May 2002), "Letters," 12-13)
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- RNS** Lionel Charles Robbins, 1932, *An Essay on the Nature and Significance of Economic Science* (London; slightly revised edition, 1935)
- ROV** Matt Ridley, 1996 and 1997 *The Origins of Virtue* (London)
- RPE** David Ricardo 1817 and later editions, *Principles of Political Economy and Taxation*
- RPL** Lloyd I. Rudolf & Sisanne Hoeber Rudolf 1987 *In Pursuit of Lakshmi: The Political Economy of the Indian State* (Chicago)
- RSM** Kakkadan Nandanath Raj & Amartya Sen, 1959, "Sectoral Modes for Development Planning," in the journal *Arthaniti*, II/2 (Calcutta)
- RST** Amiya Rao & B. G. Rao, 1974, *Six Thousand Days: Jawaharlal Nehru, Prime Minister* (New Delhi)
- RTS** U. R. Rao, 1998, "Science and Technology: Impressive Strides," in *KII*, 183-195
- RUA** Walter Rodney, 1981, *How Europe Underdeveloped Africa* (revised 2nd edition, Howard University, Washington)

- RVP** Frederick William Roe, ed., 1947 (and later editions), *Victorian Prose*
- RWC** David Ricardo, *Works and Correspondence*, ed. Piero Sraffa and Maurice Herbert Dobb, 1951-54 (10 vols., Cambridge UK; another volume is said to be forthcoming)
- SA** Margaret Sanger, 1938 and later editions, *An Autobiography*
- SAC** André Siegfried, 1937, *America Comes of Age* (London)
- SAS** Sudhir Anand & Amartya Sen, 1994, *Sustainable Human Development: Concepts and Priorities* (Oxford)
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- SCC** Amartya Sen, 1985 and later editions, *Commodities and Capabilities*
- SCE** Vernon L. Smith, 2002, "Constructivist and Ecological Rationality in Economics," in *AER* XCIII, 465-508
- SCP** Paul Anthony Samuelson, 1966-85, *The Collected Scientific Papers of Paul A. Samuelson* (5 vols.; MIT Press, Cambridge MA and London)
- SCS** John Strachey, 1932 and later editions, *The Coming Struggle for Power*
- SCT** Amartya Sen, 1960 and later editions, *Choice of Techniques*
- SCW** Amartya Sen, 1971 and later editions, *Collective Choice and Social Welfare*
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- SDF** Amartya Sen, 1999, *Development as Freedom* (New York)
- SDP** David Steinman, 1990, *Diet for a Poisoned Planet* (New York)
- SEA** Marvin S. Soros, 1997, *The Endangered Atmosphere* (Columbia SC)
- SEB** Jadunath Sarkar, 1909 and later editions, *Economics of British India* (Calcutta)
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- SEE** Edwin Robert Anderson Seligman, 1925, *Essays in Economics* (New York)
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- SEN** Charan Singh, 1981, *Economic Nightmare of India: Its Cause and Cure* (New Delhi)

- SEP Ernst Friedrich Schumacher, 1970, "The Economics of Permanence" (not to be confused with KET), in *Resurgence* III/1, 14-18, in *CNF* and elsewhere
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- SES Donald L. Sparks, 1995, *Environmental Soil Chemistry* (Harcourt Brace)
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- SFP Monkombu Sambasivan Swaminathan, 1998, "Fifty Years of Progress in Indian Agriculture," in *KII*, 146-168
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- SGL Sunanda Shet, 2000, *Gora: His Life and Work* (B. Premanand, 11/7 Chettipalayam Road, Podanur 641 023, India)
- SHA Joseph Alois Schumpeter, 1954 and later editions, *A History of Economic Analysis*
- SHI Burton Stein, 1998, *A History of India* (Blackwell, Oxford; 2nd edition, Oxford Univ. Press, New Delhi, 2001)
- SLA Paul A. Samuelson, 1947 and later editions, *Foundations of Economic Analysis* (after the 2nd edition, entitled *Economics: An Introductory Analysis*; my reference is to the 6th edition, 1964)
- SIE Charan Singh, 1978, *India's Economic Policy: The Gandhian Blueprint* (New Delhi)
- SIF Khushal Talaksi Shah, 1921, *Sixty Years of Indian Finance* (Bombay)
- SL *The Searchlight* (an Indian weekly newspaper)
- SLH stenographic notes* on Seligman's lectures on history of economics
- SLT Ernest Joseph Simmons, 1945 and later editions, *Leo Tolstoy* (more than 750 pages; not to be confused with the same author's 260-page book, *Tolstoy*, published in 1973)
- SMB Percival Spear, 1975, "The Mughals and the British," in *BCH*, 348-364
- SMC Ben Baruch Seligman, 1962, *Main Currents in Modern Economics* (2nd edition, New Brunswick NJ, 1990)
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- SMI Sumit Sarkar, 1983, *Modern India 1885-1947* (Macmillan, New Delhi; 2nd edition, Cambridge UK, 1989),
- SMM Frederick Soddy, 1933, *Money Versus Man* (New York)
- SNK Sushila Nayar, 1991, "Kumarappa as I Knew Him," in Pyarelal Nayar & Sushila Nayar, *In Gandhiji's Mirror* (Oxford Univ. Press, New Delhi)
- SNR Amartya Sen, 1994, "Freedoms and Needs," in *The New Republic*, 10/17 January 1994, 31-38
- SPE Edwin Robert Anderson Seligman, 1929 *Principles of Economics* (12th edition)
- SPF Amartya Sen, 1981 and later editions, *Poverty and Famines*
- SPI Khushal Talaksi Shah, 1935, *Public Services in India* (Allahabad)
- SPO Theda Skopol, 1992, *Protecting Soldiers and Mothers: The Political Origins of Social Policy in the United States* (Cambridge MA)
- SPT Edwin Robert Anderson Seligman, 1908 (2nd edition), *Progressive Taxation in Theory and Practice* (New York)
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- SSA C. E. Clapp, M. H. B. Hayes, N. Senesi, P. R. Bloom & P. M. Jardine, ed., 2001, *Humic Substances and Chemical Contaminants* (Soil Science Society of America)
- SSB Ernst Friedrich Schumacher, 1973 and later editions, *Small Is Beautiful: Economics as if People Mattered* (my references are to the 1999 edition: Hatley & Marks, 3661 W. Broadway, Vancouver BC V6R 2B8, Canada)
- SSC J. Szegi, ed., 1977, *Soil Biology and Conservation of the Biosphere* (Budapest)
- SSH H. Magdi Selim & Donald L. Sparks, ed., 2001, *Heavy Metals Release in Soils* (Lewis Publishers; see www.crcpress.com)
- SSP Edwin Robert Anderson Seligman, 1925, *Studies in Public Finance* (New York)
- SSR Vimal Shah & C. H. Shah, 1974, *Resurvey of Matar Taluk* (Bombay)

- SSS H. W. Scharpebeel, M. Schomaker & A. Ayoub, ed., 1990, *Soils on a Warmer Earth* (Amsterdam etc., Elsevier)
- SST Edwin Robert Anderson Seligman, 1892 and later editions, *The Shifting and Incidence of Taxation*
- STB Ernst Friedrich Schumacher, 1997, *This I Believe and Other Essays* (Schumacher Society, Foxhole, Dartington, Totnes TQ9 6EB, England)
- STC William Shakespeare, 1609 and later editions, *Troilus and Cressida*
- STV D. Sekler, 1975, *Thorstein Veblen and the Institutionalists: A Study in the Social Philosophy of Economics* (London)
- SWB Lawrence H. Summers, 1991, confidential memorandum to colleagues at the World Bank (see www.whirldbank.org/ourwords/summers/html)
- SWD Daniel Sanders, 1860 and later editions, *Wörterbuch der Deutschen Sprache* (Leipzig)
- SWM Amartya Sen, 1982 (two editions, and another in 1997), *Choice, Welfare and Measurement*
- SWN Adam Smith, 1776 and later editions, *The Wealth of Nations*
- TCC Nasir Tyabji, 2000, "Competitive Advantage through Contestation: The Indian Shop-floor at the Turn of the Century", in Neera Chandhoke, ed., *Mapping Histories: Essay presented to Ravindra Kumar* (New Delhi)
- TEM B. R. Tomlinson, 1993 and later editions, *The Economy of Modern India* (Cambridge UK; Vol. III/3 of *The New Cambridge History of India*)
- TFC Lester Thurow, 1996 (2nd edition 1997), *The Future of Capitalism*
- TIC Rexford G. Tugwell, 1927, *Industry's Coming of Age* (New York)
- TLV Rick Tilman, 1996, *The Intellectual Legacy of Thorstein Veblen: Unresolved Issues* (Greenwood Press, Westport CT)
- TMW Edward Palmer Thompson,* 1963 and later editions, *The Making of the English Working Class*
- TSP Eustace Mandeville Wetenhall Tillyard, 1944 and later editions, *Shakespeare's History Plays*
- TSR Rabindranath Tagore, 1913 and later editions, *Sadhana: The Realization of Life*
- TSS Herbert Tingsten, 1941, *Den Svenska Socialdemokratins Ideutveckling* (Stockholm); my references are to the English translation, *The Swedish Social Democrats: Their Ideological Development* (Totowa NJ, 1973)
- TTA Jai Dev Sethi, ed. 1986, *Trusteeship: The Gandhian Alternative* (Gandhi Peace Foundation, New Delhi)
- TVC Rick Tilman, 1992, *Thorstein Veblen and his Critics, 1891-1963: Conservative, Liberal and Radical Perspectives* (Princeton)
- TVG Jerry L. Simrick & Rick Tilman, 1985, *Thorstein Veblen: A Reference Guide* (Boston)
- TVI Rick Tilman, 1996, *The Intellectual Legacy of Thorstein Veblen: Unresolved Issues* (Greenwood; Westport CT)
- TW Leo Tolstoy, tr. Leo Weiner 1904, *The Complete Works of Count Tolstoy*, vol. 17 (Boston)
- UNN U. N. Newsletter (monthly; New Delhi edition), October 1998
- VBP Chandulal Nagindas Vakil & P. R. Brahmanand, 1956, *Planning for an Expanding Economy* (Bombay)
- VES Thorstein Veblen, 1900, "The Preoccupations of Economic Science," in *Quarterly Journal of Economics* XIV, 240-269
- VFD Chandulal Nagindas Vakil, 1924, *Financial Developments in Modern India, 1860-1924* (Bombay and London)
- VGM Pavan K. Varma, 1998 (2nd edition 1999), *The Great Indian Middle Class*
- VTW Thorstein Veblen, 1914 and later editions, *The Instinct of Workmanship and the State of the Industrial Arts*
- VKC M. Vinaik, 1987, *J. C. Kumarappa, The Gandhian Crusader: A Biography of Dr. J. C. Kumarappa* (Gandhigram)
- VKQ M. Vinaik, 1956, *J. C. Kumarappa and his Quest for World Peace* (Ahmedabad)
- VLC Thorstein Veblen, 1899 and later editions, *Theory of the Leisure Class*
- VMB Vladimir I. Vernadsky, 1926, *La multiplication des organismes et son rôle dans le mécanisme de la biosphère* (Paris)
- VPE M. Vivesvaraya, 1934, *Planned Economy for India* (Bangalore)
- VRE Solomon Victus, 2003, *Religion and Eco-Economics of Dr. J. C. Kumarappa: Gandhism Redefined* (ISPCK; Post Box 1585; Kashmere Gate; Delhi 110 006; <publishing@ispck.org.in>)

* The author's father, Edward Thompson, was a friend of Gandhi's; see apropos GCW XCII (the *Index of Persons*), 547).

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- WAC John Wild, 1919 (2nd edition), *Ascertaining Cost of Production* (London)
- WAE Donald Worster, ed., 1973, *American Environmentalism: The Formative Period, 1860-1915* (New York)
- WAP George Woodcock & Ivan Avakumovic, *Peter Kropotkin: From Prince to Rebel* (Montreal)
- WBB Peter Washington, 1933, *Madame Blavatsky's Baboon: Theosophy and the Emergence of the Western Guru* (London)
- WBF C. Peter Timmer, Walter P. Falcon & Scott R. Pearson, 1983, *Food Policy Analysis: A World Bank Publication* (Baltimore)
- WCU Edward Osborne Wilson, 1998 and later editions, *Consilience: The Unity of Knowledge*
- WEE Mathis Wackernagel, 1999, "Why Sustainability Analyses Must Include Biophysical Assessments," in *Ecological Economics* XXIX, 13-15
- WFL Edward Osborne Wilson, 2002, *The Future of Life* (New York), Chapter 2, "The Bottleneck" (originally published in *Scientific American*)
- WNC Mathis Wackernagel *et al.*, 1999, "National Natural Capital Accounting with the Ecological Footprint Concept," in *Ecological Economics* XXIX, 375-390
- WOH Herbert George Wells, 1920 and later editions, *Outline of History*
- WPE Ted Winslow, 2003, *The Perverse Economy: The Impact of Markets on People and Nature* (Palgrave, New York)
- WPI Walt Whitman, 1871 (often published later as well), "A Passage to India"
- WPS Barbara Wood, 1984, *Alias Papa: A Life of Fritz Schumacher* (London)
- WRF Mathis Wackernagel & William Rees, 1996 and later editions, *Our Ecological Footprint* (New Society Publishers, Box 189, Gabriola Island BC VOR 1X0, Canada)
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- WS Jörgen Weibull, 1968, *Sweden 1918-1968* (London)
- WSL Herbert George Wells *et al.*, 1929 and later editions, *The Science of Life*

- WSP Mark Jerome Walters, 2004, *Six Modern Plagues and How We are Causing Them* (Island Press, Washington DC)
- WTM Herbert George Wells, 1895 and later editions, *The Time Machine*
- WTV John Cunningham Wood, ed., 1993, *Thorstein Veblen: Critical Assessments* (3 vols., Routledge)
- WWH Herbert George Wells, 1931-32, *The Work, Wealth and Happiness of Mankind* (2 vols., London and New York)
- WWW Herbert George Wells, 1898 and later editions, *The War of the Worlds*
- YSS Yuval P. Yonay, 1998, *The Struggle over the Soul of Economics: Institutional and Neoclassical Economists in America between the Wars* (Princeton)
- ZRR Stefan Zweig, 1921, tr. E. and C. Paul, *Romain Rolland: The Man and his Work* (New York)

INDEX

(Page-numbers in parentheses are for implicit references, mainly to authors of works cited by abbreviation.)

- Ability
 - of the Earth to support our growth 165
 - of humanity to despoil the sea 129
 - to-pay taxation 14
- Abject poverty 9, 21, 65-66, 89;
 see also Famine(s)
- Åbo Akademi University xiii
- Abnormal temperatures and/or
 humidity afflicting workers 178
- Abruptly enlarged
 numbers and kinds of city jobs, and
 city markets for new imports 137
- Absence (alleged)
 - of beggary or theft *ca.* 1830 in India 156
 - of an unbridgeable chasm *ca.* 1930
 between India's loyalty to her
 concept of self-government
 and Britain's loyalty to *her*
 concept of trusteeship 172-73
- Absolute *vs* marginal values 135
- Academic
 - convenience of one-dimensional
 economic calculations 60-61, 182
 - tenure 15, 56
- Accelerating
 - the destruction of ecosystems 165
 - the rise in standards of living 182
- Acceptable
 - kinds of mechanization 144
 - levels of carcinogenic pesticides 149
 - philosophical base for economics
 (according to Schumacher) 131
- Access to jobs in adaptable,
 vigorous, import-replacing cities 138
- Access-roads 142
- Accidental old-world quaintness 177
- Accident insurance 61
- Accidents, industrial 178
- Accountancy, Accounting
 - Kumarappa's expertise in 4, 6, (27),
 29-30, 47, 148
 - monetary 4-6, 29-30, 32, 38, 51,
 135, 177
 - in terms of non-monetary abstractions
 50, 52, 164 135
- Accumulation of capital 140-41
- Achievement, final (according to
 Samuelson), in economic theory 152
- Acid rain 139
- Acres
 - cultivated 46
 - deforestrated 154
- Active sympathy with the essential and
 characteristic life of a place 177
- Actual
 - per-capita income *ca.* 1930 in
 Indian villages 132, 183
 - uses of human capabilities 117
 - valuations by the people concerned 127
- Adams, Henry Carter 29, 172
- Adaptation of institutional economics
 to non-Western context(s) 147
- Addiction(s) 74, 140-42
- Adequate markets, lack of 157
- "Adjoining social sciences"
 (i.e. adjoining to economics) 60
- Adjusting expenditure for traditional
 social occasions to one's
 actual income 187
- Administrative
 - difficulties in handling
 non-monetary forms of taxation
 and of governmental salaries 35
 - expense(s), burden 22, 24
 - inefficiency 55
 - "machinery" 161
 - strictness, vigilance 30, 32
- Advanced social theorists 157
- Advances in mid-20th-century
 methods of production 189
- Advantages, to society at large,
 of having a rich class 175
- Adumbration (by Kumarappa)
 of ecosystems 41
- Aesthetic taste generating demands
 that are
 - nearly limitless 72
 - unpredictable 121-22
 for a clean environment 157
- Affectation of seeking public benefit 58
- Affection(s), social 60, 93-94, (101), 158
- Affluence
 - rendering subsidies affordable 125
 - said to be eternally increasing
 because of capitalism 74, 115
 - threatening the environment 127
- Africa 11, 62
- Afterlife, alleged 159
- Agarwal, Shriman Narayan 40, (76:
 GSW), (89: *NGP*, *NPP*, *NRG*, *NTP*)
- Age, weight, temperature, pulse,
 cell-counts etc. requiring,
 in medical science, different
 kinds of units of measure 146

- Aggravated competition 164
macro-ecological problems 165
- Aggregate capital 136
output/income/consumption 82, 158
- Aggressive expansion (since ca.1500) of European influence abroad 170
- Agrarian economy commercialized 65
Reforms Committee 49
- Angresano, James (123-25: *APM*)
- Agricultural chemistry 84-85, 88, 128
colleges 56
credit societies 161
disaster, current 154
indebtedness 180
labor force 126
load limit 179
methods, antiquated 176
"non-violence" 131
pesticides 129, 144, 149
research 38, 88, (132), 153, 178-80
revolution 137
short employment 180
Stoffwechsel 85
- Agriculture exploitive 153
feasible weather for 134-35
industrialized 51
microeconomic guide to 52
more intensive 126
primary importance of 144, 165, 179
products of 131
- Ahimsa 131
- AICC 47
- AICC Economic Review* (144: *MSI*)
- Aid from the USA to India 54-55, 91, 161
to Western Europe 138
- Air breathable 121
claiming regard and attention 158
polluted 153
- Aird, John S. (120: *APC*)
- Airplanes 157
- AIVIA 30-40, 63, 90, 104, 108, 143-44, 159, 180, 182, 189
headquarters 48;
see also Maganwadi
publications 38
- Alcoholic beverages, harmful 27, 180
- Algebra 145
- Alienation 44, 69-71, 103-04, 116, 121, 157-58
of land 67
- Alkaline soil 153
- Allahabad 178
- All-embracing planning (attributed to Gandhi) 126
- All-India Congress Committee: *see* AICC
Education Board 37
Khadi and Village Industries Commission 50, 54
Village Industries Association; *see* AIVIA
Spinners' Association 38, 50, 106, 189
- Allocation of Community Development funding 161
resources 122
- al-Qaddafi, Muammar 163
- Alternative(s) to artificial contraception 155
exclusively monetary reckoning 51-52, 135, 164
forced integration (on British terms) of India into world capitalism 159
- Altogether different degrees (in various parts of the world) of industrial development, habits, views of life and forms of government 172
- Altruism, altruistic values 43, 63, 91, 115, 189
- Aluminum 180
- Ambassadors, American, to India 55, 122
- Ambedkar, Bhimrao 15, 91-92
- Ambition 42, 101
- Amenities of affluent living 87
primary (i.e. basic) 101
seductive 123
of urban vs of rural life 162
- America (United States of): *see* USA
- American Academy of Pediatrics (150: *AAP*)
aid to India 54-55, 91, 161
ambassadors to India 55, 122
Association of University Professors 15
businessmen at board meetings 136
collection of essays on ethics 117
Economic Association 13-14, 121, 136
economic imperialism 54-55, 109
invention(s) 148
population growth 112
president's/vice-president's staff 128
professors who taught Kumarappa 2, 41, 145
role in India's Community Development Program 54
State Department 132
-style globalization (156-57), 160
way of life, 20th-century 157
welfare-state provisions 117
writer(s) of popular nonfiction 165
- American Economic Review, The* (14, 77: *AER*), (128: *SCE*)
- "American Empire's Next Step, The" 9
- Amritsar 176
- Analogies between economics and medicine or physics 146
emergence of modern Western prosperity during the late 19th & early 20th centuries, and currently poverty-stricken nations getting into big-is-beautiful globalization 156-57
- Analysis and constructive reform in the West 174
of some current (ca.2005) plagues 153
Marxist 114, 176
nutrient- 145
short- vs long-run economic 2
of soil 57, 130, 160
- Anand, Sudhir (121-22: *SAS*)
Y. P. xiii
- Anarchism, anarchists 59, 62
- Ancient economic thought 16, 96
Europe 148
Greece 10, 85-86
India 163
Orissa 181
- Andersson, Jan Otto xiii, (136: *ALE*)
- Andhra 38, 55
- Anglicized elite in India 176
- Anglo-Indian author, anonymous 98
- Angry propaganda (by Kumarappa) 36
- Animals, dangerous 158
ministering to human needs 158
- Animal diseases 180
husbandry 179
muscle-power 63
replaced by human muscle-power 187
souls (alleged) 90
spirits (human) 134, 158
- Anna Karenina* 62
- Annas 98
- Annual per-capita pounds of nutrition 46
- Anomalous taxes 181
- Antagonism between capital and labor 106
- Anthropology 176
- Anthroposophy 179
- Anti-imperialism, anti-imperialists 19, 27, 55, 89, 102, 108, 163
- Anti-poverty programs 56, 125, 162
- Antiquated agricultural methods 176
- Anxiety felt by Tolstoy 61
- Apathy toward radical innovation 132
- Application, uncritical, of exotic social concepts 127
- Apportionment of taxes 181
- Appreciating Indian conditions 127, 182
- Appropriate techniques/technology x, 1;
see also Inappropriate ... technology
- Appropriation of inputs to the Community Development Program 160
of the term "ecological" to mean something that has nothing to do with ecology 128
- Approval, pro-forma, of economic guidelines for India 49
- Arable land 45, 154, 157 *et passim*
sea 144 (i.e. cultivable)
- Architecture 151
and city planning 140, 177
- Arduous work 32, 159
- Area (used by a given population) of ecologically productive land and water 135
- Arguments Gandhian, "too stale to mention" 148
turned around and used against World-Bank proposals 157
- Aristotle 60, 100
- Arithmetic 145
- Armaments ix, (4), 33
"modern" (ca.1925-30) 171, 174
-race ca.1970 149
- Arrow, Kenneth (119: *ASC*), (146: *PEH*), (156)
- Arsenic 129
- Arthaniti* (118: *RSM*)
- Artha Shastra* 20; *see also* Kautilya
- Arthik Samata Mandal 51, 53-54
- Artificial contraception 112, 118, 155-56
environment 28
fertilizers 57, 88, 129-30, 163
- Articles of consumption for which the main costs are labor costs 185
- Artillery 138
- Artisans, old-type 53
- Artistic expression 142
- Aryan Path* 37
- Asbestos sheets 56
- Ascetic ideals 183
- Ashe, Geoffrey (98, 106: *AG*)
- Ashrams 2, 30, 55, 78, 103, 106

- Ashton, Basil (120: *APF*)
- Asia Minor 86
- Asian Drama*... 125
- Asiatic founders of great religions 171
- Aspromourgos, Tony (3: *ANC*)
- Assembly-lines 106
- Assessing
Kumarappa's effectiveness
in the AIVIA and in politics 144
Nehru as prime minister 160
- Assessment, by insurance companies, of risk 159
- Assets (of non-profit organizations that have fulfilled their missions) given to other (non-profit) organizations 141
- Association(s)
All-India Spinners' 38, 50, 106
All-India Village Industries: *see* AIVIA
American
Economic 13, 15, 121, 136
of University Professors 15
for Economic Equality: *see*
Arthik Samata Mandal
Employers' 169-70
Hindustan, of America 28
[for] Intermediate Technology
Development 132
International Economic 121
Millowners', of Bombay 118
National (USA), of Manufacturers 6
for the Protection of the Adirondaks 15
for Social Politics 61
Soil 132
Young Men's Christian 6
- Assumptions, simple-minded,
in orthodox economic theory 116
- Astonishing scientific gains 133, 165
- Astrology 133
- Asylums for children of
working women 59
- Atemporal substitutability 122
- Atheism 159
- Atlantic peoples' insurrectional tension 175
- Athletic competitions 159
- Atomic: *see* Nuclear
- Attenborough, Richard 67
- Atrocious allocation of resources 122
- Auditors 34; *see also* Accountancy
- Austerity 127
- Authoritarian rule 120
- Automatic, fixed-rate inflation 175-76
- Automobiles, elegant 123
- Availability of
unreliable statistics 127, 182
- Avakumovic, Ivan (63: *WAP*)
- Average, weighted, of (a) potential
quantitative benefits multiplied by
(b) probabilities of getting them 158
- Averages among patchy statistics
struck over too vast a range 182
- Avoiding gratuitously invasive
(medical) procedures 158
- Awakening from "collective delirium" 165
- Aykroyd, W. R. (178: *ARP*)
- Aztecs 132
- Babeuf, François-Noël 62
- Babies
damaged by rough handling 150
feeding 45
- Babul 31
- Backward
cities 138
economy, causes of 180
peoples or races 116, 170
- Bacteria 153
- Bad
side-effects, unforeseen 158
habits inimical to the survival
of the human species 91
- Badly paying initial stages of
process of converting raw
materials into finished products 184
- Bajaj, Jamanlal 40
- Baker, Charles Whiting 29, 173-74
- Bakunin, Mikail 33
- Balance, ecological 115, 129
- Balanced
cultivation scheme(s) 45
diet(s) 45-46, 48, 183
- Balfour, Evelyn 179
- Balkanization 54
- Baluta 186
- Bamboo-work 52
- Bananas 176, 185
- Bandits 110
- Bangalore 181
- Bangles 32, 52; *see also* Ornaments
- Baniya caste 24
- Banks, banking 15, 28, 46,
127-28, 130, 136, 138, 145,
150, 156-57, 173, 176, 180
-holiday 173
methods and principles 180
- Bank of Sweden 128, 136
- Bankruptcy 135, 141
of (neo-orthodox) economic theory 136
- Barbers' subsistence guaranteed 186
- Bargaining power 176, 186
- Baroda 181
- Barter 35, 110-11, 115, 180, 186, 189
- Basic
amenities 101
capabilities 117
education 120, 125, 161
foodstuffs and health 161
- Basic Works of Mahatma Gandhi* 15
- Battle with Nature (a concept
regarded by Tagore as Western) 132
- Bayonets viii, 34, 123
- Beans and peas 46
- Beatings (of Indians in 1930) 26
- Beaud, Michel (74: *BDB*)
- Beautiful old buildings 20
- Beder, Sharon (128: *BGS*)
- Beer 173
- Bees, bee-keeping 38, 41, 180
- Beethoven symphonies 2
- Beggars 118
absence of, formerly in India 156
various types of, in modern India 180
- Behari, Bepin (89: *BGE*)
- Behavior affected by culture 147;
see also Institutionalism
- Below-average incomes 164
- Benares 186
- Benefit(s)
automatic, to society:
see Invisible Hand
to the group rather than to
individual members 42
to oneself due to benefitting others 169
sought without contribution 42
- Beneficial government policies 150
- Benefits in India somewhat altered
under Nehru 161
- Bengal 65, 68, 111
- Bennett, George (68: *BCE*)
- Bereavement, a time of life when
one needs to be cared for 142
- Beri, Shridhar Govind (28: *JBI*)
- Berle, Adolf 78
- Berlin 14, (32), 133
- Berry, Wendell (148: *BLE*)
- Best and worst that human
nature is capable of 132
- Bhatia, Bal Mohand (65: *BFI*)
- Bhave, Vinoba 57
- Bhole, L. M. (89: *BES*)
- Biases in research 127
- the Bible 1, 7, 40, 60, 96, 114
- Bicycles 51-53
- Big
-and-quick economic experiments 150
bureaucracies 139
corporations 122, 150
factories ix, 5, 72, 104-06
historical mistake
(i.e. capitalism, allegedly) 115
labor force needed for some ventures 49
-is-beautiful globalization 156
-is-dangerous 150
-is-inevitable 123
- Bihar 29-30, 38
- Bilgrami, S. A. R. (163: *BIM*)
- Bimetallism 180
- Biocapacities 136
- Biogas 144
- Biographies of Kumarappa 2
- Biologist(s)
calling Gaia "a tough bitch" 146
knowing that laboratory results might
not be valid in field conditions 179
- Biology 152, 180
- Biomass 135
- Biophysical units (for accounting) 135
- Biosphere sustaining humanity 165
- Birds 158
caged 167
- Birla, G. D. 100-01, 105
- Birth-control 112, 126, 138, 180
- Birth-rate decline in Sweden 124
- Birukoff, Paul 62
- Bishop of Calcutta 25
- Black flags 50
- Black,
C. E. (163: *BDM*)
R. D. Collison (72: *BMR*)
- Blacksmiths 53, 186
- Blake,
Hubert 29, 173
William 83-84
- Blame for incompetence in businesses 141
- Blaugh, Mark (75: *BSW*; 78: *BTV*; 136: *BCR*)
- Bleached bones 69
- Blessings
becoming curses 169
mass-produced (e.g. nice soap,
bright lighting, e-mail) 151
- "Blindness" to certain economic activities
that are essential to well-being 141

- Blood
and blood-letting 95-96
-brothers 101
chemistry 145
pressure 146
- Blunt, Wilfrid Scawen 29
- Board meetings at American firms 136
- Bobby Shaftoe 7
- Bodily labor 45, 62, 72, 103-06, 115
- Bogaziçi University xiii
- Bold (Western)
analysis and constructive reform 174
and persistent experimentation 78
- Bolsheviks ix
- Bombay
Congress 33
famine 65
institution for village industries 38
Kumarappa in 6, 10, 27, 30
his tailor there 23
Millowners' Association 118
municipal finance 15
newspaper 27
publisher 51
rail-line to Calcutta 30
University 177
unorthodox economists
(besides Kumarappa) 51
- Bombay Chronicle* (55: *BC*)
- Bombing 138, 157
- Bombs (new American types) 52
- Bone-manure 180
- Bones of cotton-weavers 69, (172)
- Bongaarts, John (37: *RMM*)
- Bookkeeping: *see* Accountancy
- Books
paraphrased by Gandhi 15, 117
written by Kumarappa 1, 4, 19-25,
36-37, 47-48, 51-53, 120, 154, 163
- Boom(s), economic 59-60, 120
- Booth, Charles (85: *BLL*)
- Born, Karl E. (61: *BRW*)
- Borrowing between peoples of altogether
different degrees of industrial
development, habits, views of
life and forms of government 172
- Bose,
Ashish (156: *BPQ*)
Sugata (36, 161: *BJM*)
- Boston
Brahmins 5
Ethical Society xiii
- Botany 177
- Bottom 5%. 10% and 40% of
India's population 161
- Boulding, Kenneth E. (77: *BIE*; 149: *BEI*)
- Bourgeoisie vii, 61, 71
- Bourke-White, Margaret (101, 105: *BHF*)
- Bouyant personal circumstances 118
- Bowles, Chester 55, 143
- Boycotting 108-09
- Brahmanand, P. R. (51: *VBP*)
- Brahmins 95
- "Brain-dead" bureaucrats 139
- Brains Trust (1932) 78
- Brahmanand, P. R. 51
- Brandt, Barbara (89), 141-42
- Brass, Paul R. (50: *BPI*)
- Bread labor 45, 62, 103-04
- Breathable air 121
- Breeding cattle 180
- Breman, Jan (106: *BMU*)
- Brende, Eric (103: *BBF*)
- Brendon, Piers (176: *BCV*)
- Brethren, mute (i.e. animals),
ministering to human needs 158
- Bribery 56-57, 176
- Bricks and choices of bricklayers 94-95
- Bright lighting 151
- Bristol 171
- Britain,
allegedly
an instrument of history 116
ripe for revolution 175-76
Kumarappa in 4-5, 47
- British
administrative structures in India 172
agriculture 84-85
aristocrat(s)
accusing R. C. Dutt of inaccuracy 65
declaring that nothing brutal happened
in the Amritsar massacre 176
distinguishing between chemical, bio-
logical and ecological approaches
to agricultural research 179
authorities forbidding that Kumarappa
read anything other than the Bible 2
balances of
trade 64
payment 178
bourgeoisie 71
bureaucracy in India 4
capital in India 175
capitalists guaranteed a fixed return 67
civilians gaining valuable experience
in India 22
coal, exhaustible 84
Coal Board 130-32
code-name (secret) for a
scheme to balkanize India 54
- British (cont.)
commercial self-protection 178
committees 66-67
conflict, *vis à vis* India,
of economic interests 9
connection rendering India helpless 99
crisis ca. 1930 177
dependence on foreign trade 26
drain of wealth from India 20,
63-66, 116
East India Company 21-22,
27, 58, 65-66, 104
economic relations with the
Commonwealth and colonies 178
economists
regarding man solely as a
being who desires wealth 4
favoring mathematical formulas 145
see also Edgeworth, Hobson, Jevons,
Keynes, Malthus, Marshall, Mill,
Pigou, Ricardo, Robbins, Robin-
son, Ruskin, Smith and Soddy
economy in the 19th and
early 20th centuries 178
enslavement of the Indian nation 98
exploitation of
India's mineral resources 11, 171
the world 111
factories 68, 173
foreign-investment policies 178
founders of the Labor Party 92
guarantee of a fixed return
on investments in India 67
God-sent (allegedly) mission in India 4
government of India 4, 11, 19,
21-23, 29, 35, 63
handloom weavers 68-69
hegemony in India
causing worse famines 65-66, 120
celebrated nostalgically 65
inimical to India? 104
justified by the ideal of trusteeship 102
hardly improving outcastes' lot 171
political effects of 176
weakened in the 1930s 90
historians 65, 67, 90, 104-05, 112, 156
Home Charges 64, 66
House of Commons 59, 63, 92
imperialism 8, 20-22, 54-55, 65,
104, 116, 143, 147, 173
imposition in India of economic
checks and safeguards 173
imprisonments of Kumarappa 26,
28-29, 37, 39-40, 47, 111, 147
inability (after World War II)
to keep India in the Empire 45
-Indian
anonymous author 29, 172
financial obligations 27
industrial
leadership funded by
capital from India 22
monopolies 18
towns growing like mushrooms 170
industrialists considered evil 147
industry controlled in wartime 173
inflation 178
interest in African coastal natives 169
- British (cont.)
interests limiting the expansion of
the Indian economy 171
Labor Party 92
labor problem 177
law(s) in India 172-73
impoverishing India 99
replacing payment in kind with
monetary land-taxes 21
liking for sturdy, durable products 39
loss of India's trust 11, 171-72
political alliances 178
unemployment due to steam power 68
manipulation of Indian tariffs 26
manufacturers seeking markets 18
mineral wealth 84
military expeditions 67
missionary organizations 10, 68
monarchy assuming responsibility
for India 22
monetary power 96
navy 83
need for Indian help in war 11
Nobel Laureate in physics 60
nostalgia for hegemony in India 65
-occupied zone of Germany 130
opponents of economic orthodoxy 16
parasitical relation to India 21, 116
parliament 59, 63, 68, 156
people nationalistically ethical in
business dealings with each other 5
plan to Balkanize India 54
policies 39, 177
political domination of India 104, 109
161
population growth 154, 169
prime minister describing Indians
as industrious 21-22
products in India 107
promises to India broken 11, 67, 171
raj weakening in the 1930s 90
readers in the mid-19th century 59
relatively weak grasp (*vis à vis* young
Kumarappa) of accounting details 5
Royal Society 83
ruin of the Indian artisan class and
creation of a rural proletariat 176
rule in India: *see* hegemony in India
secret code-name for a scheme
to balkanize India 54
slave trade 171
sociologist's account of the
welfare state 117
soldiers putting down the Luddites 68
stealing from Africa 11, 168
-style sarcasm 117
taxation in India
crushing 63-64
exceeding British costs in India 67
on salt 22, 25
stricter than under the Moghuls 22
tax revenues from India, spent on
commercial dividends to
private investors in Britain 66
military expeditions elsewhere 67
term, "calico" 108
terms of economic integration 159
towns (Bristol, Liverpool *et al.*) 171

- British (*cont.*)
trade-deficit with the USA and continental Europe 64
trade with India 171
trusteeship 4, 68, 102, 169-72
variations in industrial profits 178
vegetarian friend of young Gandhi 21
views in regard to
Gandhian social work 105
war 34, 149
welfare state 19
White Man's Burden 116
writers (on economics)
between Smith and Malthus 16
- Broad
abstract economic indices 135
comparisons 114-16
historical trend toward more humane economic relations 147
thinking required to understand open-system economics 134
- Broadcasting 180
- Brockman, John (146: *BTC*)
- Brooks, Paul (130: *BRC*)
- Brown,
Judith M. (30, 38, 105: *BGP*), (90: *BMI*)
Lester R. (129: *BEE*, *BRP*)
- Browning, Martin (74: *BCL*)
- Brutality
associated with ideology 148
in a clash between rich and poor 175
see also Cruelty and Values, ostensible absence of
- Bryson, Bill (153: *BNE*)
- Buck, Norman Sydney (28: *FEE*)
- Buddhism 131, 133, 163
decline of 141
- Buildings
new 39, 187
old 20, 186-87
description of (re: architecture) 177
- Building social order from the base up 151
- Bullets 103
- Bullock(s) 57
-drawn vehicles 50, 106, 187
led by nose-strings 45, 71, 123, 158
- Bulwer-Lytton, E. R. 66
- Bunge, Mario A. (60: *BFP*, *BIS*)
- Bureaucracy, bureaucratization 4, 54, 56, 139, 161
- Bureaucratic interference 172, 175
- Bureaucrats
allegedly "brain-dead" 139
in Germany 61
in India
causing oppression 160
corrupt 56
- Burglars' jimmies (regarded by Davenport as productive when the burglars profit) 13
- Burke, Edmund 68
- Burma 131, 133
- Bush, George W. 128
- Businesses dying destructively 141
- Business sentiment, prevalent 172
- Businesses for Social Responsibility 141
- Business Week* (136: *RBW*)
- Butter 46
- Buying bananas or fish 176
- By-products of atomic fission 129
- Cairnes, John Elliott 17
- Calculating
acceptable levels of carcinogenic pesticides in food 150
what it would take to provide a satisfying and sustainable life for everyone into the indefinite future 165
- Calcutta xi, xiii, 25, 30, 108, 178
- Calico 108
- Callousness towards the ordinary man
an alleged hallmark of capitalism 130
- Calories per day 45-46
- Cambridge Journal of Economics* (78: *CJE*)
- Cambridge University 1, 73, 80, 82, 123, 136
- Canals 20-21, 23, 53, 55-56, 184
- Cancer (150), 154
- Capabilities 117, 161
- Capacity, capacities
for coöperative self-reliance 151
general personal 117, 122
of the well-off to do good to all 169
to be well-off 121
- Capital
accumulation 140-41
due to certain facilities 180
aggregated 136
at war with labor 170
-cost of productive employment 51
-expenditure/investment 22
-goods-led, import-substituting industrialization 161
-intensive economic activity 184-85
growth 118
invested in human beings 73
irreplaceable 133
large 49
origins and increase 180
output 77
redemption 27
surplus 24
- Capitalism vii, 34, 36, 71-72, 76, 114-16, 130, 132, 159
emergence of 177
in crisis (*ca.* 1930) 177
interlinked with patriarchy 140
North American constructive responses to 141
suffering from a certain addiction and a certain blindness 141
- Capitalism, Socialism or Villagism?* 40
- Capitalist(s) 95
Christian 114
patrons and friends of Gandhi 40, 125
world unlike an enlightened kibbutz 149
- Capitalistic
decision rules 76
methods (*ca.* 1935) of farming 179
- Captains of industry 60
- Carcinogenic pesticides in food 150, 153
- Caring for
other people 142
the work force 140
- Carlowitz, Hans Carl von 83
- Carlson, Allan (124: *CSE*)
- Carlyle, Thomas 16, 59-60, 70
- Carnegie foundation(s) 124, 173
- American National Biography* (78: *ANB*)
- Carnivores 147
- Carpenters 186, 188
- Carrots and papaya,
sources of Vitamin A 145
- Carrying capacity (economic) of Earth 135
- Cars 106, 175
- Carson, Rachel 88, 129-30, 134
- Cart wheels 188
- Cartels 174
- Cassandra 143
- Caste(s), caste-system 9, 24, 40, 80, 91-92, 94-95, 163, 176, 180
land-owning 50
- Catching snakes, rats etc. 155
- Categorical imperative 117
- Cathedral of Königsberg 90
- Catlin, Warren 178
- Cattle 180; see also Bullocks
- Cautious doctors 158-59
- Cell-counts (medical) 146
- Cement sheets 56
- Census (1961) of India 126
- Center for
Child-Health Research 150
Neighborhood Technology 141
- Central
banks in India 176
control of AIVIA administration 31
government in Sweden 124
Planning Commission (Indian) 48
Provinces of India 183
- Centralized
economic planning 139
industries
accumulating wealth and distributing it badly 188
exploiting natural resources on a service basis for the benefit of producers working in decentralized units 188
functioning thus as accessory to decentralized industries 188
supported by propaganda 185
production viii-x, 33-34, 49, 106, 119, 151, 187-88
- Ceramic, thermous-type refrigerators 144
- Cereals 46
- Chadha, Yogesh (67, 106: *CRG*)
- Chadwick, Edwin (85: *CRS*)
- Chakraborty, Radindra Nath xiii
- Chakki(s) 38
- Chamberlain, Edward 152
- Champaran 98
- Chandragupta 20
- Change(s)
in the British political system 178
in social conditions 74, 158
in the use of consumable energy 177
of wealth from directive ownership to a monetary claim on production 175
- Chanyakya: see Kautilya
- Chaos, financial, in the wake of peace after a world war 173
- Chapman, Sydney J. (28: *CE*)
- Charity, charities 125, 180
- Charm of infrequent luxuries 142
- Charwomen 177
- Chastity 112
in marriage 155
- Chauduri,
Amit (120: *CML*)
Pramit (161: *CIE*)
- Chauhan, Sandeep (89: *CGG*)
- Chauvenism 143
- Cheap accessibility to literature 170
- Cheapness, sought after in Japan 39
- Cheating (for the sake of private gain) 95
- Checks and safeguards in the Indian economy, imposed by Britain 173

- Chemical
fertilizers 38, 57, 88, 130, 153, 163
pesticides 129
research in small field plots 179
- Chemistry 128, 152
agricultural 84-85, 88
- Cheney, Richard 128
- Chennai: *see* Madras
- Chicanery, a hallmark of
an unhealthy economy 96
- Chickens 4, 180
- Chikhalia 25
- Childhood need for care 142
- Child labor 79, 174, 176
- Children's Hospital (in Norfolk VA) 150
- Chillies 98; *see also* Cuisine
- China 7, 16, 35, 39, 52, 120, 157
- Chinese-style globalization 160
- Choice of Techniques* 118
- Cholera 86
- Chossudovsky, Michel (164: *CGP*)
- Christian concept of trusteeship
4, 22, 68, 168-72
- Christianity 4, 6, 9,
25-26, 109, 141, 143
- Christian Science Monitor, The* 175
- "Church of Silent Demand, The" 169
- Church(es)
in New York City 9, 11
often opposed to
changes in the social fabric 170
- Cider and fruit-trees 83
- Cigars vs essential nutrition 35
- Cinema 44, 123, 180
- Circular tubes of porous clay, for
water-efficient irrigation 144
- Circulation of
blood 95
matter (i.e. Stoffwechsel) 85
money, velocity of 180
wealth 95-96
- Circumstances
dominating 121
personal 118
- Cities and the Wealth of Nations:
Principles of Economic Life* (137-39)
- Cities in Evolution* 29, 177-78
- City, cities 114, 132
dwellers living luxuriously 187
planning and architecture 140
compared metaphorically to reefs 177
supplying technology and capital
to distant regions 137-38
- Civil
disobedience in India 31, 94, 115
service in India 4
strife in Sweden 124
war in the USA 65
- Civilization(s) 76, 78, 86, 95,
97, 104, 114-15
based on renewable resources 131
evolution of 131
threatened by misery and disruption 174
- Civilized workshops, ancient 148
- Çizakça, Murat (163: *CHP*)
- Clapp, C. E. (153: *SSA*)
- Class-consciousness 33-34
- Classes (human)
of beggars 180
in conflict or struggle 59, 91 116
"natural," "public," "fiscal,"
"social," "artificial" 179
- Classical
economics vii, 2-3
laziness of Indians
(according to Gandhi) 125
- Clay
floor (sat on by Kumarappa
dressed in silk trousers) 23
tubes, porous, used irrigation 144
- Clean
environment 156
production of consumable energy x
villages 110
- Cleaning up after pollution 85, 142
- Climate 65, 105, 107, 160
- Climbing (by Samuelson, allegedly)
towards the heavens 152
- Clinging to social traditions 187
- Clive, Robert 47
- "Cloak of tattered patches"
(offered by the AIVIA) 33
- Clocks 52-53
- Closed-system models 59, 70,
73-74, 76, 114, 128, 154, 156
- Cloth, aggregate consumption and
production of, in India 108
- Clothing 118, 183
in cold weather 123, 168
erotic 123
- Clouded hills (in England) 83
- Club(s) 1, 44, 123, 142
- Coal 41, 84, 86-87, 131
Board (British) x, 130-32
mines (Indian) 49
- Coale, Ansley J. (120: *CPC*)
- Coase, Robert H. (58: *CEE*)
- "Cocktails" of pollution 157
- Code-name for plan to balkanize India 54
- Colbert, Jean-Baptiste 83
- Collateral
decimation of natural environment 165
effects (in general) 90
- Collecting
taxes partly in kind, not all in cash 160
throwaway containers 142
- Collective bargaining 15
- Collectivism 40, 178
- Colleges
Doveton 4, 11, 102
Schumacher 134
- Cologne (175)
- "Colonel Sahib" (i.e. Kumarappa) 30
- Colonial
civil service 4
conditions 104
patriarchy 140
- Columbia University 6-19, 61, 78
- Combatting ineffectively
poverty, illiteracy and disease 161
- Combining
money & barter-exchange 35, 186, 189
various carcinogens 150
the worst features (allegedly) of
capitalism and socialism 160
- Coming
Struggle for Power, The* 29, 176-77
Victory of Democracy, The 37
- Commanders, regimental, winning more
loyalty than money could buy 94
- Commercial jingles 71
- Commercialization of agriculture 65
- Commissions (cash), illegal 56-57
- Committee (Swedish), shamed 128
- Commodities 69-70, 145
- Common-sense
approach to modernization 163
grasp of human nature 157
- Common welfare 178; *see also* Public needs
- Commons, global 135
- Communal ownership of land 40, 54, 57
- Communalism, religious 92
- Communion with Nature x
- Communism, Communists viii, 34,
40, 52-53, 114-16
radical 13
- Communist revolution in Britain? 177
- Community
Church (in New York City) 15
Development Program (in India)
54, 56, 121, 160-62
psychology 82, 158
- Compact fields (of each crop) 46
- Company towns 138
- Comparisons among different veins
of economic thought 114-16
- Compassion 118
- Compensation to landlords
for land-reform 102
- Competition
among firms with some degree of
monopolistic control 136, 152
athletic 159
between rural and urban values 162
international 164
market- 9, 26, 39, 48-49, 54, 60,
91-92, 136
unhealthy 41, 87, 136, 157, 182
- Competitive system in transition 174
- Complaisance about injustice 117
- Complementing the precept of
keeping "hands off" Nature 153
- Complex
of "sources" and "sinks" 134
systems, tinkered with 158
technologies 118
- Complexity in economics
as in medicine 146
- Composing music 71
- Composting 179
- Comprehensive rural surveys 23,
37-38, 164, 183
- Compromises
fuzzy (by Nehru) 48, 160
with harsh reality 118
- Concentration of
grain to support city folk
who don't raise food 148
wealth and/or power 49, 178
- Concepts, economic, reduced to
one dimension 60, 135
- Conclusions vitiated by depending
on unreliable statistics 182
- Condition of the Working Class in Eng-
land in 1844, The* 86
- Conditions determining
what is good or evil 155
- Confidential World-Bank memorandum
156-57
- Conflict resolution 116
- Confucius 15, 37
- Congress, Indian National 27, 30, 32,
47, 49-50, 53, 105, 126, 176
- "Conquering" Nature 86, 132
- Conscious
deductive processes 128
desires 118

- Conservation
of energy, Law of 88
of forests 56-57, 86-87
-movement 86-87, 152
of water 55, 57, 160
- Consequences of depleting vital sources
and/or letting vital sinks overflow 134
- Consolidated fund charges 173
- Constituent parts of human work 146
- Constitution of the
Republic of India 53, 56, 91
- Constructive work (Gandhian) 105
- Consulates, British, cost of (in China
and Persia), charged to India 27
- Consumable
energy x, 41, 87, 130, 134
timber and water 41, 87
- Consumer(s)
affluent 135
decision-making 145
- Consumer-articles/goods viii, 49,
51, 54, 106
- Consumerism x, 115, 122-23
- Consumers'
needs 122
responsibilities 5, 26
surplus 73
- Consumption,
analysis of 145
luxurious 127
substitutable forms of 122
- Contacts with Non-Christian Cultures...
A Case-Book in the Christian
Movement Abroad* 9
- Containers, throwaway 142
- Contemporary (21st-century) crisis xi
- Contemporary Pediatrics* (150: NCS)
- Content of production 149
- Continuity of life 41
- Contraceptive(s) 112, 118, 155-56
Testing Center 156
- "Contribution of Public Finance to the
Present Economic State of India, The"
(Kumarappa's M.A. thesis) 19
- Control of
the Earth 86
economic theories and
government policies 122
large-scale industry in India 48
one's life and destiny 99
rivers 55
social-work expenditures in Bihar 30
- Conurbations 132
- Conventional economic wisdom: illogical,
meretricious and even dangerous
(according to Galbraith) 123
- Conway, Edward C., Jr. (150: NCS)
- Cooper, John Milton, Jr. (87: CPD)
- Coöperation
affectionate 60, 93-94
with the Community Development
Program 56
vs competition 9
financial, to prevent hasty pro-
duction of inferior goods 186
among Nature's units 41, 87, 153
among panchayats 179
of the poor with the rich 102
and profit-sharing 12, 17
in a search for truth 11
with the USA 52
among working people 63
- Coöperative
methods 125
organizations 46-48, 52-53, 62,
92, 162, 176, 180, 188-89
self-reliance 151
- Coördination of
large-scale and cottage industry 48
Nature's units with each other
41, 87, 153
provincial policies in India 56
wealth and talent 36
- Copper 41, 87
- Cornelius & Davar (an accounting
firm headed by Kumarappa) 6
- Cornell University 11
- Corporations 14, 122
giant 150
prominent, beginning to fail 141
- Corruption
bureaucratic 56
municipal 172
- Cortès, Hernán 132
- Cosmos (111), 135
- Cost(s)
of idleness and unproductivity
among displaced people 137-38
of living 135
of production viii
of promoting cottage industry 126
to society: see External costs
of a subsistence diet 183
- Cost of a New World, The* 10-11, 169-71
- Costly slum-clearance programs 136
- Cottage industries 8, 11, 21, 48,
51, 110, 119, 125-26, 172, 188
- Cotton (see also Spinning)
-boom in India due to
the Civil War in the USA 65
-clothing needs in India
for 100,000 people 46
for 3.3 million people 119
-crops replacing food-crops 56
export from India to England 8, (65)
industry in India 176
- Cotton (cont.)
handworkers subsidized in India 49
machine-made in England 11, 69, 171
-mill owners in India 101
-production processes in India 110
regional techniques of manufacture 32
spun by
an unidentified old man (Gandhi) 23
refugees 103
-weavers' bones bleaching in India 69
- Council bills 180
- Counterproductive moral harshness 143
- Counting poor men's ribs 121
- Country with the lowest wages 156
- Cournot, Antoine-Augustin 152
- Courtesy (in Amartya Sen's writing) 117
- Coveting 111
- Cowardice, worse than violence
(according to Gandhi) 115
- Coyajee, Jehangir 182
- Craft products, quality of 125, (151), 189
- Cravings for more elegant automobiles,
exotic food, erotic clothing and
elaborate entertainment 123
- Creating Alternative Futures: The End of
Economics* 142
- Creating economic dependency 151
- Creativity 147
- Creatures, types of 42-43
- Credit (monetary) 28, 180
a "monster child" of money-economy
(according to Kumarappa) 185
public 47, 172
-societies (coöperative) 161, 176
-supply of paper currency 180
system (worldwide) 174
theory, history of 7
- Creditors, bankrupt 141
- Creed of growth: see Capitalism
- Crime (13), 74, 80, 99, 104, 138
- Critical assessment of
Kumarappa 1, 143-65
Nehru as prime minister 160
- Cropland (aggregate, per-capita) 135
- Crop(s) 23, 45
rotation of 179
- Crores 100, 119
- Crossley, Thomas F. (74: BCL)
- Cruelty x, 180; see also Brutality
- Cultivating
honey 144
land in temperate zones 179
a multiplicity of wants 185
sea-vegetables 144
- Cultural
advances and/or evolution 115, 178
idiosyncrasies in modernization 163
level, general 125
reactionary ideals attributed by
J. P. Narayan to Kumarappa 33
trappings of British imperialism 143
- Culture 9, 26, 33, 39, 45, 115, 127
allegedly more important than
material prosperity 178
high viii
of permanence 165
- Curiosity, commodities appealing to 72
- Currency
-contraction 180
paper- 175, 180
- Current
deprivations 121
dominant economic order 151
wants 135
- Currently poverty-stricken nations
getting into big-is-beautiful
globalization 156
- Curzon, George N. 68
- Custodianship 114
- Customs duties (i.e. taxes on imports)
viii, 12, 33, 109, 174, 179
- Cut flowers wilting (a metaphor for
economic plans only superficially
related to human nature) 44
- Cutting
and clearing and burning 129
hay at the right time 95
- Cyclical needs for care 142
- Dacca 8
- Dacoits 110
- Dairy farming 86, 180
- Daly, Herman E. (122: PTL)
- Damage due to pollution 142, 149-50
- Dams 53, 106
- Dan (a system of payment in kind) 186
- Dangers
to future generations 150
now global for the first time 163
of totalitarian domination 165
- Dark
Age 165
satanic mills 83
- Darling, Malcolm L. 181
- Darwin, Charles 91, (179: DAW)
- Darwinian natural selection 63
- Das,
Amritananda (89: DFG,
B. 181
Gurcharan (51: DIU)

- Dasgupta, A. K. (72: *DET*)
Partha S. (122: *DER*)
- Dates (edible) 180
- Datt, Gaurav (161: *DRP*)
- Datta, Amlan xi, xiii, (89: *DAT*), (151: *DPH*), (152: *DPD*)
- Davar's College of Commerce 6
- Davenport, H. J. 11-14, (75), 77, 88, 163
- Davis, Kenneth S. (77-78: *FDR*)
- Day-care centers 59
- DDT 129
- Deadly pollution decried by scientists 153
- Death toll of 1959-62 famine in China 120
- Debt(s)
foreign, endangering the autonomy of weak states in the 19th century 172
incurred by farmers 180
public 7, 16, 22, 27-29, 47, 55, 66, 160, 172, 174, 181
-traps, national, 20th-century 160
- Decadent capitalism 73, 177
- Deccan 65
- Decentralized economic organization 48, 115
ownership in flourishing urban neighborhoods 137
production x, 33, 151, 162
- Dechristianization of new progressive movements 170
- Decision(s) (economic)
due to "animal spirits" 158
-making, fast and frugal 128
-rules, capitalistic 76
- Declaration by the Government of India in 2004 156
- Declining agricultural labor force 126
land fertility and level of water tables 160
- Deeply engrained social prejudices 125
- Deep thinking required to understand open-system economics 134
- Defeat of Russia by Japan 170
- Defective historical analogy 157
- Deficit spending 161
- Definition of productivity 13, 163
- Deforestation 154
- Degradation, ecological 81, 121, 128
of 1.2 billion hectares of land 154
- Degree of social status 91-92
- Deléage, Jean-Paul (83: *DHE*)
- Deliberately restricting wants 76, 141
- Delirium 165
- Delhi School of Economics xiii
- Delusions 93; *see also* Illusory
- Demand(s)
and supply 179
for a clean environment 156
for commodities 73, 163
elasticity of 73
exorbitant governmental 98
for justice and common honesty 172
for knowledge, created by the Industrial Revolution 170
for labor 4
primary vs middle-class vs industrial vs modern 52
for safeguards against unfair commercial discrimination 173
-side economic theory 164
- Democracy 119-20, 165
- Demonstrating marketing techniques 180
- Denial, allegedly scientific, of ethical concern 61, 75, 80, 116, 146, 178
- Dependency 151
on imported oil 160
on the monsoon 184
on urban amenities 162
- Dependent regions or countries 138-39
- Depletion of natural capital 135
non-renewable resources 83
soils and seas 153
vital resources 134
- Demoralization due to idleness 138
- Deogirikar, T. R. (67: *DGG*)
- Deployment abroad of Indian soldiers 150
- Depressions (economic) 59, 79
allegedly extraordinary 173
- Deprivation 118, 120
- Desai, Mahadev 30
Meghnad (51: *DDP*)
- Desecration of natural beauty 81
- Deserts 154
- Designing one's own house and/or furniture 44
- Desire(s) 118, 123
of the ruling race to hold others in bondage as suppliers of raw materials 185
to be slim 183
unlimited 72, 157
- Despair 106
- Destitution 118
- Destruction of the dominant economic order 151
- Destruction of (*cont.*)
environments 129
humankind 41, 158
source(s) of benefit 42-43
- Destructive competition 48
economic progress 131
flooding, weather 96, 153
- Determination, willful, in economic planning 139
- Determinism, parochial, of Rostow 163
- Devaluation of women 141
- Devastation 121, 150
- Development viii, 8, 29, 86
from above 161
of agriculture and of the automobile 139
of capitalism in India under Nehru 159
of cities, before ingenious improvements in rural productivity were devised 138
economic, successful, by improvisational drift 139
of economic activities without catering to demands of a hierarchically superior group or an addiction-driven system 142
of education, health-care etc. 117
of the era of electricity 115
as expansion of freedoms 121
goal-oriented 139
of Indian industrial self-reliance 161
of intense intellectual life 132
of labor-saving machinery 33, 173
of large-scale industry in an orderly way 173
in India 48
of natural resources 169
of personality 134
potentially endless (allegedly), of the market economy 137
qualitative, vs quantitative expansion 139
rural 45
small-is-beautiful 46, 48-49, (52), 92, 115, 132-33, 139, 150, 160, 165
social 115
of skills 92
thwarted by population explosion 155
- Devil taking the hindmost 40, 120
- Devising alternatives to exclusively monetary reckoning 51-52, 135, 164
- Dey, Sushil (117: *DAG*)
- Dharma 93, 97
- Diabolical-scale wars of destruction 189
- Diagnosis 146
- Dictatorship 119
- Dictionary citations 134
- Diet
and digestion 45
including healthy roughage 146
- Diet' (*cont.*)
reduction of 76
subsistence, cost of 183
vegetarian 46
- Dietetics, Dieticians 145, 181
- Different kinds of units of measure used in medical science 146
- Different religious heritages of Gandhi and Kumarappa 163
- Digby, William (21: *DPI*)
- Diggens, John Patrick (78: *DKC*)
- Digging out the positive, progressive elements of Marxian, Gandhian and Liberal options 163
- Dignity of work 45
- Dilapidated houses prevalent ca.1940 in Indian villages 187
- Diminishing returns, Law of 179
- Directive Principles (in the Constitution of the Republic of India) 56
- Disaffection 94
- Disaggregated income classes 145
- Discipline, Gandhian, of the animal nature of humans 134
political 107
of the self 104, 117
too rigorous in regard to frugality and wantlessness 125
- Discounting 75-76, 135
- Discount rate 180; (*see also* Gesell)
- Discourse, opaque, by experts 145
- Disease(s)
in cattle 180
in humans due to hatred 169
ecological pollution 85-86, (129), 153
-ridden humans 86
wiping out crops 153
- Disequilibria 60
- Disharmony due to competition for non-renewable resources 41, 87
- "Dismal science" (economics) 60
- Displaced and dislocated people 138
- Disposal of lethal substances 129
- Disproportional spending for traditional social occasions 187
- Dissipations of consumable energy 177
- Distances between (a) consumers and (b) the sources sustaining them and the sinks where their waste goes 135
- Distant markets 151
- Distinguished biologist describing "Gaia" as "a tough bitch" 146

Distinguishing between
 acceptable vs unacceptable kinds
 of mechanization 144
 aggregate vs per-capita increases 139
 chemical, biological vs
 ecological approaches
 to agricultural research 179
 costs of labor vs of raw materials,
 insurance, marketing etc. 185
 "classical" vs
 "neo-classical" economists vii
 crude and advanced technology 177
 delivering quality education and public
 health to the masses vs delivering
 subsidies to the better-off 160
 depletion vs pollution 83-87, 134, 164
 development-loans vs philanthropy 138
 different causes of impoverishment 173
 direct vs indirect taxation 180
 early vs later stages in processing raw
 materials into finished products 184
 engineering vs human problems 118
 evil British carnivorous imperialists vs
 morally good Indian vegetarian
 peasants and artisans 147
 feudal vs capitalist patriarchy 140
 food crops vs money-crops 28
 foodstuffs nutritious to India's
 people vs foodstuffs that can
 be sold more profitably abroad 160
 good vs bad lending 174
 home industry vs village industry
 vs cottage industry 51, 164
 how to create an army vs how to
 create a developing economy 138
 how people are affected by what others
 say about them vs how by what
 others really think of them 169
 income vs capital 133
 knowing that physical work is healthy
 vs knowing how much 159
 making loans etc. vs creating
 self-generating economies 138
 metamorphosis of organisms vs
 healing of organisms 138
 monetary
 bankruptcy vs exhaustion of
 biologically vital resources 135
 claim on production
 vs directive ownership 175
 costs to profit-seeking firms
 vs real costs to society 149
 value vs real content of production 149
 wages of the present (ca.1915) vs an
 allegedly more vital budget of
 an allegedly imminent future 177
 "natural" vs "artificial" vs "fiscal"
 vs "social" classes of people 179
 necessary vs optional
 functions of the state 180
 Nehru's stated policies vs
 their implementation 161-62
 nutrient analysis vs
 analysis of food-commodities 145
 paleotechnic vs neotechnic eras 177-178
 predatory vs parasitical vs enterprising
 vs socialist vs service-oriented
 economic activities 147

Distinguishing between (cont.)
 programmatic declarations vs real
 governmental support 139, 162
 prosperity vs extravagance 173
 productive vs protective vs
 prohibitive customs duties 181
 qualitative development vs
 quantitative expansion 139
 renewable vs non-renewable resources
 41, 131
 sectors of an economy oriented towards
 the world market vs towards
 satisfying local needs 151
 sources vs sinks 134
 the sources-sinks metaphor vs
 what is really happening 134
 sustainable development vs
 sustainable economy 152
 utility, value vs price 179
 various rates of return in the
 various stages of processing raw
 materials into finished products 184
 "vertical" vs "horizontal" economic
 planning 36
 wants vs needs 122, 158
 water in a fountain vs in a pitcher 70
 "wolf-pack" vs "sheep-herd" societies
 147
 Distraction (from ominous indications
 of macro-ecological pollution)
 due to being busy 165
 due to hype, religion
 and/or monetary analysis 135
 Distribution
 equal 39, 98
 equitable 48, 98
 of cultivation 46
 of gold and monetary credit 180
 of power between men and women 140
 of stored water 55
 of useful or pleasurable things 95
 "primary" (according to Davenport) 14
 of wealth due to machinery 179
 Disturbances in "the economy of Nature"
 41, 87, 158
 Diversion (of human energy and
 resources) from the gen-
 eration of wealth 157
 Divine (allegedly)
 countenance 83
 judgement within each person 167
 ordinance 22
 providence 159
 souls 116
 Division
 of labor 45
 theoretical, of ecological
 degradation into deple-
 tion and pollution 134
 Diwan, Romesh (89: DLE)
 Doane, Russell xiii
 Dobbert, Gerhard 29, 175
 Doctors (medical) 104, 153, 158-59

Dorfman, Joseph (13, 18: DEA)
 Doles 110
 Dolgoff, Sam (62: BA)
 Domestic
 industry 58
 servants 118
 Dominance of spirit over body 168
 Dominant economic order now vii, 151
 Domination (by humans) over
 circumstance 121
 Nature 132
 Dostaler, Gilles (74: BDB)
 Doubt (as an existential problem) 99
 Doubtful value of
 forced industrial growth 161
 Dough baked on embers 98
 Dovetailing (or lack of it) of various
 economic forces emanating from
 cities into their hinterlands 137
 Doveton College 4, 11, 102
 Dowd, Douglas F. (78: DTV, DVA)
 Down-to-earth economic knowledge 145
 Dragging of feet (by Amartya Sen
 in regard to ecological issues) 122
 "Drain of wealth" 20, 63-66, 116
 Drainage 154, 161
 "Drawing a line" to eschew
 moral values 61, (133), 164
 violence 155
 Drawing with abandon upon nonrenew-
 able resources of the planet 165
 Dreams 25
 Drèze, Jean xiii
 Drinkable water 121
 "Drink habit" (alcoholic) 27, 180
 Drive toward labor-saving devices 185
 Droughts 55, 119
 Drudgery 177
 Drugs, drug-addiction 74, 138
 Dualism(s) 36, 42-43, 79, 114, 147
 Duality of (a) critique and
 (b) positive reconstruction 152
 Dumping toxic waste 156
 Dunayevskaya, Raya (70: DMF)
 Duncan, Richard C. (84: DWE)
 Durability
 of British products
 (e.g. Rolls-Royce cars) 39
 of money more than of
 perishable merchandise 176

Dust, poisonous 178
 Duties (see also Customs duties)
 in general 86, 97
 between groups 40
 of economists 142, 149
 of government vii, 81; see also
 Functions of the state
 vis à vis rights 42-92
 Dutifulness associated with "econo-
 my of permanence" 43, 147
 Dutt, R. C. 23, 59, 64-67
 Dying rivers 86
 "Dynasties" (figurative) 35
 Early
 ecological studies 83
 Earnings, foregone, regarded as
 a measure of social cost 156-57
 Earth x, 86
 its ability to support our growth 165
 carrying capacity of 135
 history of 129
 not an organism 153
 Earthquake in Bihar 29
 Earthworms 179
 Easily pleased, deprived people 118
 East India Company, British 21-22,
 27, 58, 65-66
 Eastern Europe 86
 Echoes of Kumarappa's criticism of
 Nehru's economic policies 51,
 54, 125-26, 160-62
 Eckholm, Erik P. (153: ELG)
 Eco-feminism 140
 École Libre des Sciences Politiques 17
 Ecological
 balance and/or integration 1, 115, 129
 crises 121
 degradation 41, 81, 87, 121, 128-29
 economics 82-88, 130-36, 140,
 152-54, 165
 "footprint" 135
 Lebensraum 136
 "narodism" 88
 rationality 128
 services 135
 "shadow" 135
 situation of humanity 158
 sustainability 122, 136
 values 133
 Ecologically
 productive land and water 135
 unbalanced economies 134-35
 unsustainable
 international commerce 135-36
 Westernization 132
 Ecological Economics 129,
 (135: WEE, WNC, WRM), (136: ALE)

- Ecological Indicators* 129
- Ecologists extending the scope of chemical and biological investigation 179
- "Ecology" (coining of the term) 83
- Ecology* 129
- Ecology and Letters* 129
- Econometrics, Econometric Society 2, 121, 123
- Economic activities
- essential to well-being 141
 - with no possible limits in view 141
- administration 130
- backwardness, causes of 180
- behavior affected by institutions 122
- Commission (European) 125
- crisis after World War I 174, 178
- culture of permanence 87, 165
- development viii, 8, 29
- of Burma 131
 - successful 139
- discourse with virtually no statistics 139
- doctrines
- orthodox 4, 18, 58-60, 74-76, 89-90, 114-16, 132, 136, 146-48, 164
 - Gandhian 91-92, 95, 101, 109, 158
 - novel 16, 58-59, 72, 74, 77, 80, 158
 - Western, applied to India 27, 79
- experiments 150
- fairness (5), 16, 26-27, 42, (56), (90), 93, 95-97, 110, 114-16, (118), 120, 123, 148, 160, 168, 172-73, 185-86
- forces emanating from cities into their hinterlands 137
- inequalities 61-62, 96, 114
- innovation, normally urban 137
- logic, impeccable but dangerous 156
- Man concept 4, 58, 74, 76, 90, 95, 116, 136, 146-48
- management, top-down 115
- mistakes 150
- organization 28
- planning 79
- Planning Commission (European) 125
- Program Committee (Indian) 47
- progress, moral evaluation of 131
- reckoning, terms of 39, 50-52, 135, 157
- relations, non-exploitive 141
- sectors, some of them oriented to the world market, yet some to satisfying local needs 151
- self-sufficiency 49, 51, 80, 108-10, 125, 147
- stimulation by fixed-rate inflation 176
- surveys 23, 37-38, 144
- "take-off" 132
- Economic theory, allegedly bankrupt 136
- going to seed in mathematical formulae 145
- Economic theory morally neutral? 13, 61, 75, 80, 116, 146, 178
- Economica* (146: RLD)
- Economically productive burglars' jimmies 13
- Economic and Political Weekly* (89: GPI)
- Economic History of British India, 1757-1837* 64-66
- Economic Journal, The* (75: RIC)
- Economics: An Introductory Analysis* (82), (152)
- Economics of Enterprise, The* 14
- Economics of Imperfect Competition, The* 152
- "Economics of Permanence, The" 133
- Economics of Welfare, The* 80
- "Economy" (derivation of the word) 58
- Economists, female 136-42
- Economy of Cities, The* 137
- Economy of Permanence* 40-45, 49, 142, 146, 152, 175
- Ecosocialism 86
- Ecosystems 41, 83, 165
- Ecosystems* 129
- Edgell, Stephen (78: ETV)
- Edgeworth, Francis Y. 17, 39
- Edible oils 46
- Edison, Thomas 175
- Edge of subsistence 118
- Edge of the Sea, The* 129
- Edinburgh 10
- Educated people, unemployed 180
- Education
- basic 117, 120, (160)
 - Board (Indian) 37
 - inculcating extravagance 173
 - a national investment 73
 - national system(s) of 21, 34
 - popular 174
 - preparing young men to enter industries and commerce 184, 188
 - redirection of 126
 - supported by international loans 138
 - technological 182
 - universal 52-53
 - in villages 45, 56, 180
- Effectiveness in the kitchen 177
- Efficiency 5, 39, 49, 115, 118
- due to resourceful adaptation 137
- Egalitarian reforms 127
- "Eggs, golden", laid (according to Gandhi) by entrepreneurial "geese" 102
- Ehrlich, Paul R. (153: EME) & Anne H. (122: EBR)
- Einstein, Albert 157
- Elaborate
- entertainment in the USA 123
 - weddings in Indian villages 25
- Elasticity of demand 73
- Electric
- current 134
 - domestic order 177
 - engines 61
 - supply 49
- Elegant
- automobiles 123
 - hut designed by Kumarappa 32, 151
- E-mail 122, 151
- Emergence of modern-type prosperity in the West 156
- Emerson, Ralph Waldo 5, 89
- Emigration 123, 176
- Emitter-tubes of porous clay 144
- Emperor of Ethiopia 75
- Empire(s) 42
- American 9
 - Aztec 132
 - British 27, 45, 65-66, 89, 108, 174
 - Moghul 22, 35
- Employers' associations 169-70
- Employment (gainful) 48, 119
- to transform raw materials from abroad into manufactured goods 183
- Energy
- accounting 135
 - consumable x, 41, 87, 130, 134
 - as unit of measure in economic theory 135
 - conservation of 88
 - human 96, 145
- Engels, Friedrich 70-71, 85-86, 100
- Engines, electric and internal-combustion 61
- Engineers 91
- England vii, x, 8, 11, 59, 134
- sound of heart (according to Gandhi) 99
- English (see also British)
- agriculture 84-85
 - and Indian greed 109
 - aristocrat stating that nothing brutal happened at Amritsar 176
 - cholera epidemic 86
 - college named after Schumacher 134
 - economists who ignored history 177
 - enlightened public opinion 130
 - factory workers (44), 123
- English (cont.)
- internment camp 133
 - language 55, 144
 - promotion of African slave-trade to America 171
 - regard for religion and humanity 169
 - ruling class 178
 - village during World War II 133
- Enjoying the best things of this Earth 168
- with renunciation 111
- Enlightened kibbutz, maximizing welfare 149
- self-interest 42
- Enmity 41
- Enriching few while costing many 105
- Enterprise(s) 14, 39, 45, 140-41, 147
- preparing in a socio-economically beneficial way for their demise 141
- Entertainment, elaborate 123
- "Entfremdung" (the German word) 70
- Entitlement to food 120;
- see also Bread Labor
- Environment and History* 129
- Environmental Protection Agency (USA) 150
- Environmental Law Quarterly* (37: KES)
- Environment threatened by affluence 127
- Epidemics, epidemiology 86, 152
- Equality (in principle)
- of distribution 39, 98
 - of needs 114
 - of status 110, 114
- Equations of general equilibrium 152
- Equilibria
- biologically important 155
 - market- 73, 123, 146, 152, 155
- Equitable distribution 48, 98, 186
- Era of agricultural disaster 154
- Eriksson, Leif (18: EKF)
- Ralf xiii, (88: EEM)
- Erosion 57, 154, 179
- Eschewing moral values 61, (133), 164
- violence 155
- Eskimos 54
- Esprit de corps 94
- Eternal salvation 159
- solutions to economic problems 152
- Ethical (Culture) Society
- in Boston xiii
 - in Chicago 15
 - in New York 15

- Ethics
dwelt upon by Gandhians 116
in regard to technology 118
seen in the perspective of the struggle
for Indian independence 147
- Ethiopia 75
- "Eugenic order" 177
- European
agriculture 84
civilization, expanding 170
history, ancient 148
welfare-states 117
- European Journal of Sociology, The*
(117: MWS)
- Evaluations, nuanced, in
normative economic thinking 148
- Evasion of Gandhian truths 149
- Evelyn, John 83
- Ever nastier bacteria and viruses 153
- Everything learned to the age of 18 157
- Evil
effects of competitive money-economy
182, 188-89
-Good dualism 131, 147, 155
methods and principles 116, 171
spell caused by continual
association with inferior minds 169
- Evolution of Provincial
Finance in British India, The* 15
- Evolutionary economics 77
- Examination of Dogmatic Theology, An* 62
- Executive branch (US government) 128
- Excesses of industrialism 105
- Exchange
between currencies viii, 34, 180
par 180
- Exercise, healthy 107
- Exercising caution in economic
policy as in medicine 158
- Exertion, human physical 32, 45,
62, 103, 159
- Excise taxes 12
- Exclusively selfish behavior 58;
see also Economic-man theory
- Exhaustion of natural resources
x, 81, 130, 153
- Exhuberant modernism in the arts 165
- Exorbitant demands 98
- Exotic theories applied uncritically 127
- Expansion
of European civilization 170
of market economy,
undermined 164
uneven 120
- Expansionism, unlimited 131
see also Capitalism
- Expectations 118
- Expenses
military and administrative 22
for social occasions in villages 187
- Experimental
economics 157
psychology 60
- Experimentation, economic 150
- Exploitation (in various senses)
agricultural, of land 153-54
bureaucratic 175
by means of telegraph lines,
roads and harbors 169-70
of European workers 106
going on "merrily" 169
of gratitude 94
by international trade 149
of India's natural resources
by British imperialists 102
for the benefit of
decentralized producers 188
of Nature 114
of peasants 99, 176
of the poor by the rich 116, 136
of the soil 55
unfair 11, 22
- Explosion of human population
46, 59, 112, 126, 154-55, 165
- Exponential increase in the rate of
scientific and technical advances 165
- Export (from India)
of gold 180
-market, manufacture for 51, 108
of raw materials for use
in foreign factories 183, 186
of surplus products 188
- Expressing regional personality 177
- Expropriation 63
of expropriators 125
- Extending dependency 151
- External (in some sense)
benefits 9
biocapacities 136
costs (viii)-ix, 34, 81, 142, 149, 159
debt 55
security 48
wars 27
world 83
- Extinction of
humankind 76
species after species 129
by the thousand 165
- Extreme moral expectations 116
- Ezioni, Amatai (2: *EMD*)
- Fabb, John (65: *FBE*)
- Faber pencil(s) 50
- Fabian socialism 175
- Face of a poor, weak man
(kept in mind by Kumarappa) 99
- Facism 40
- Factors
of cycle of life 41
of production 28, 179
- Factory, factories
acts (i.e. laws) 170
-hours 104
new 142
-life 44
mass-production viii, 25, 34, 43, 72
86, 97, 104, 106, 115, 148, 164
"the more the merrier" 97
-owner(s), worker(s) 44, 71, 100-01
-system 19
- Failure(s)
of banks 180; *see also* Bank holiday
large-scale economic 126
to see that the population explosion was
becoming sharply aggravated 165
to take some useful points from
Pigou and Keynes 164-65
- Fairness 26, 73, 114-15,
120, 148, 160, 185-86
- Fairbank, John K. (35: *FSC*)
- Fairchild, Fred R. (28: *FEE*)
- "Faith, or, Being Led of the Spirit"
167-68
- Falcon, Walter P. (145: *WBF*)
- Families
controlled in size: *see* Family planning
with state-subsidized services 124
old 94
their relation to the central state 124
unoccupied for much of the year 24
- Family
accommodations 48
-based handwork 125
housing 124
human 91
immediate 58
Kumarappa's 4
planning 112, 126, 156, 162
Planning Board (Indian) 156
power relations 140
quarrels over property 100
Schumacher's 133
Seligman's 15
system, joint 9, 30-31, 40,
80-81, (176), 180
- Famine(s) 20-21, 25, 65-67,
99, 111, 120, 174
-relief charges 27, 66-67
- Famines in India* 65-66
- Fanciful notions of a golden age 163
- Farmelant, James xiii
- Farmers, farming 20, 114-15, 178, 180
- Farm organization 179
- Fascism 177
- Fashion, economics of 13
- Fashionable word ("ecological") 128
- Fast and "frugal" decision-making 128
- "Fatal conceit" (von Hayek) 150
- Fatalism 176
- Fear ix, 173
- Feasible
kinds of mixed economy 151
weather 134
- Federal-reserve banks 180
- Feeling exploited 136
- Fehr, Ernst (157: *FGF*)
- Feiser, Louis, dutiful and creative
while inventing napalm (147)
- Female economists 136-42
- Feminine vitality 177
- Feminism 13, 140-41
- Ferm, Vergilius 37
- Fertile land reduced to deserts 154
- Fertility of soil 21, 31, 38, 85, 163
- Fertilizer(s) 38, 57, 84-85, 87-88,
121, 130, 144, 153, 163, 170, 179
- Field days for pests in India 46
- Field, J. G. (153: *FHS*)
- Fifth Avenue (in New York) 8
- Fighting 83, 130
for better wages, work-conditions 170
- Final
achievement (alleged) by Samuelson
in economic theory 152
surrender (by Samuelson in a dispute
about economic theory) 136
- Finance and Commerce in Federal
India* 29, 172-73
- Financial chaos in the wake of peace 173
- Fine ladies, futile 177
- Finite ability of the Earth to support
human growth 165
- Finns 170
- Fire-protection 142
- First
duty of the human race (according
to Gifford Pinchot) 86
-hand economic observations,
systematic (by Kumarappa) 145
of India's Five-Year Plans 118, 152
three of her Five-Year Plans 161
- Fiscal impossibility (according to Gandhi)
of compensating landlords for
confiscation of land 102

- Fischer,
Herbert 32, 104, 144
Louis (108: *FGL*), (131: *FLG*)
- Fish
and Wildlife Service (USA) 129
selling 176, 185
- Fishing 81
- Five
Indian economists writing a book 39, 181
kinds of
classes of people 179
economic behavior 14, 41-42, 147, 163
intellectual profession 95
urban growth derived from
import-replacing 137
- Five-Year Plans 48, 51, 118, 139, 152
- Flagpoles 53
- Flags, black 50
- Flapper driving a sports car 175
- Fleming, Donald J. 9
- Flesh covering ribs 121
- Floods 55
- "Flower in the Crannied Wall" 12
- Flows into sinks transformed and
thereby replenishing sources 134
- Fodder 110
- Folk-psychology 157
- Food
-availability vs entitlement 120
-commodities 145
-deprivation 118
for the hungry 123
-grains 46
-poisoning 153
-policy analysis for the World Bank 145
a primary factor in the economy 130
-production 56
in relation to the body 134
-stuffs, basic 161
with toxic residues 154
- Force of the dollar in your pocket 95
- Forced industrial growth 161
- Forces of production vii, 33
- Ford, Henry 175
- Foreign
aid 161
-exchange banks 180
industry 58
trade, regulation of 188
- Foregoing unnecessary precepts 158
- Foregone earnings 156-57
- Forest(s), Forestry 10, 15, 22,
56-57, 86-87, 131, 135, 160, 180
- Forewords by Gandhi 40
- Forging Capitalist Patriarchy... 140
- Forms of social organization 159;
see also Institutions
- Fortified trading-stations 194
- Fortune 122
- Fossil
fuels x, 41, 84, 131;
see also Coal and Oil
shells 177
- Foster, John Bellamy (70, 85: *FME*, *FMJ*)
- Fostering economic self-reliance and
capacity for self-development 151
- Fountain pens 52
- Fraas, Karl N. (85: *FKP*)
- Fragile macro-ecological situation 158
- Fragmentation of India 54
- France 59
- Frank, Andre Gunder (164: *FCU*)
- Franklin, Benjamin 12
- Freeing of the arts in the 20th century 165
- Freedom(s) 18-19, 34, 91-92, 121
- Freemasons 6
- Free
enterprise 51
India 102
speech and press 175
trade 18, 178, 180
will 41, 87, 134, 158
- Freezing to death, even though not
(according to some economists)
in need of heating 75
- Freight charges 64
- French colonies 16
- Friendship Pact (1931) 16
- Frontline (121: *FL*)
- "Frugal", fast decision-making 128
- Frugality 125
- Fruits 46, 180
- Fruit trees 83
- Fuel(s) x, 41, 84, 130-31;
see also Coal and Oil
- Full
flowering of human life 132
models (of economies) 1
- Fumifigium, or The Inconvenience of
the Air and Smoke of London* 83
- Functions of the state 178, 180;
see also Duties of government
- Furniss, Edgar (28: *FEE*)
- Furniture, designing one's own 44
- Fusion of town and country 86
- Futile fine ladies 177
- Future
of Britain and of capitalism 177
indefinite 165
of our species and of life on Earth 165
people x, 121, 164-65
reconciliation between
local and global economy 152, 160
value of articles of consumption 72
- Futurism 142
- Fuzzy compromises 48, 160
- Gächter, Simon (157: *FGF*)
- Gadgil, Dhananjaya R. (162: *GPP*)
- Gaia 146
- Galbraith, John Kenneth 12, 122-23
- Gambling 159
- Game(s),
a necessary kind of amenity 142
to amuse factory hands 44, 123
zero-sum 136
- Game-theory 128
- Gandhi (the film) 67
- Gandhi, Indira 53
- Gandhi, Mahatma vii-viii, 9-11, 14-15,
19, 21-22 *et passim*
allegedly a planner 126
calling up (according to Tagore)
the great powers of the meek 171
up to his elbows in dirt 104
- Gandhi's
alternative to artificial contraception 155
anti-imperialism 108
appreciation of Sam
Higgenbottom's work 177
approval of a report on economics 49
ashes buried together with his ideas 51
ashrams 103
Basic Works 117
book entitled *Sarvodaya* 92-97
capitalist friends: *see* Bajaj and Birla
children (four in number) 131
civil disobedience 94
convalescence in 1918 106
correspondence with Geddes 177
"crusade" for reforms 125
daughter-in-law, Nirmala 97
death 49-50, 57, 101, 103
dim view of informing people about arti-
ficial means of contraception 126
disagreements
with Kumarappa about how to
administer the AIVIA 163
with Nehru about economic
theory 100, 162
eldest child and grandchildren 23
essay on economics 60, 92-97
experimental communes 103
extreme moral expectations 116
faithfulness to the British Empire 89
female disciples at the head of
the Ministry of Health 126, 155
forewords to other writers' books 40
- Gandhi's (*cont.*)
formulation of Ruskin's concept of
social affections 158
glorification of self-employment 125
guilty plea to the charge of
preaching disaffection 99
Hindu beliefs and/or loyalty 89-90, 97,
109, 111
house in central India 54
impact ca.1930 in India 176
intimations (according to Schumacher)
of hostility toward social mobility
and economic development 126
lapses from self-discipline 117
letter calling Gora's thought and
practice superior to his own 53
liking of independent-minded people 162
medical quackery 103
moralistic talk 125
need for Kumarappa's services 23
negotiations in 1931 in England 172
opinion of the AIVIA's results 144
paraphrase of an American book 117
patriotic political concerns 88-89, 109
psychological ideas 116
physician 143
radical talk, conservative action 125
reading of Ruskin's book 60, 92-97
revolutionary proposal in regard
to basic education 126
secretaries 101, 143
social
prejudices 125
utopia 104
somewhat intemperate nature 112
spinning (daily) 104, 106
teaching a girl how to spin 107
tendency to rebel 99
unsystematic frame of mind 89
vow of chastity 131
worst mistake 154-55
years of collaboration with Kumarappa 1
views in regard to
agriculture 126
birth control 112-13, 154-55
bodily labor, bread labor 103-04, 115
caste 91-92, 110
civilization 76
craftsmanship 105
distribution of goods 98
ecology 111-12
economics 89-116
education 126
factories 104-06
free meals 104
happiness and contentment 76
karma 90
machinery 105-06
manual work 103-04
modern Western
civilization 89, 97, 117
money 91, 97, 110, 163
population and its control 112, 126
poverty 97-99
religion 90
self-employment of the individual 125
self-sufficiency 49, 52, 80, 101,
104, 108-10

Gandhi's views (*cont.*) in regard to
 self-sustaining villages 139
 spinning 105-08
 trusteeship 99-102, 125
 urban culture 89
 the USA 90-91
 vocations 91, 139
 voluntary restriction of wants 76

"Gandhi and the Politics
 of Decentralization" 34

"Gandhian Approach to Economics" 47

Gandhian(s) 107
 constructive workers 105
 economics 131 (*et passim*)

Gandhian
Economic Thought 51
Economy and Other Essays 47
*Plan of Economic Development
 for India, The* 40

Gandhi Marg (99: *GM*), (158: *LHN*)

Gandhiniketan Ashram 2, 78

Gandhi Smarak Nidhi xiii

Gangal, Anurag (89: *GM*)

Ganges 65, 110, 174

Ganguli, Birenda Nath (89: *GSP*)

Garden cities 177

Gardener(s), Gardening 44, 142, 179

Garrett, Laurie (150: *GPE*)

Geddes, Patrick 29, 34, 177-78

General
 cultural level 125
 equilibrium in market economics
 152, 155
 intelligence and judgement 73

Generalization of Kumarappa's concern
 about unhealthy competition 136

Generalized human capacities 122

Generation of wealth 157

Genesis 114

Geneva Convention 174

Genocide 165

Georgescu-Roegen, Nicholas (135: *REL*)

German
 Academy of Political Science 175
 economists 17, 19, 59, 61, 70-72,
 76-77, 130-33, 172, 175-76
 language 61, 70-71, 123,
 manufacturers 185
 program to invent the atom bomb 133

Germany vii, 14, 17, 39, 59, 61, 69,
 76, 86, 130, 133, 172, 175, 179, 185

Gerstein, Joseph xiii

Gesell, Silvio 29, 175-76

Getting
 behind the other person's defences 143
 rich for sure (allegedly) by
 dealing in junk bonds 128

Ghani(s) 38

Giri, A. K. xiii

Giving priority to agriculture and
 universal primary schooling 165

Glass-blowing 2

Globalization vii, (18), 115, 149, 156
 between *ca.* 1980 and 1995 164
 of human rights 165

Global
 commons 135
 domination 165
 environmental change 153
 experiment x
 market economy 164
 problem(s) x
 solutions, consensual 136

GNP 149

Goal-oriented economic
 development 139

God(s) (alleged) 4, (22), 96, 98,
 152, 159; *see also* Divine
 communicating with humans 168
 in the forest or the sea 167

"God in the Trees" and "The God
 in Yourself" 167

Goddard, Burton L. (10: *GCM*)

Gokhale, Gopal Krishna 59, 63, 67

Gold, Gold standard 20, 28, 41, 64,
 81, 87, 173-76, 180, 186-87

"Golden"
 age (alleged, of Hinduism) 163
 egg (laid by special goose) 102

Goldsmiths 37, 53, 187

Good
 doctors 158-59
 -Evil dualism 131, 147, 155
 health 117
 housing 44, 123
 -will delegation to China 52

Goodland, Robert (122: *PTL*)

Goods
 commercial 54
 of good quality 151
 homespun 82 *et passim*
 made-to-order 150-51
 mass-produced 151

Goose laying golden eggs 102

Gora 53, 92

Gospel according to Matthew (7, 60: *MG*)

Gospel-of-growth creed 132

Gospel and the Plow, The 178

Gough, Kathleen (50: *GSI*)

Government 19, 28, 115
 assistance to agriculture 125
 compensating (by spending)
 for weak consumer demand 82
 of coöperatives by village
 representatives 46
 declarations vs actual
 schemes of economic support 139
 distribution of wealth 49
 Gandhian 114
 of India 4, 7, 11, 21, 23, 29, 35, 53
 interference in society 124
 management of
 certain industries 49
 forests and mineral wealth 188
 Marxist 114-16
 -of-India declaration (2004) 156
 policies 45, 116
 in Sweden 124
 provincial 46
 service(s) 122, 188
 setting price limits 122
 subsidies 124
 support scheme in South Asia 139
 as trustee for unborn generations 81

Graduated income tax 14

Grain 46
 stocks 120
 surpluses 148

Gram Udyog Patrika 38

Grand-scale economic failures 125, 150

Grants 180
 to regions lacking vigorous cities
 138

Gratitude 94

Gratuitously invasive procedures 158

Great
 Depression 79, 173
 religions 171

"Greatest good of greatest number" 51

Greece 10, 85-86

Greed ix, 60, 77, 93, 113, 116, 146

Greek (language) 58

Gregarianism 40, 42-43, 164

Gregation, human 49

Green
 manure 180
 Revolution 46, 138, 154

Gresham's Law 180

Grimy cities 86; *see also* Filth

Grinding monotony 79

Groping toward a reconciliation between
 global and local economy 160

Gross
 economic inequalities 61-62, 114, 140
 national product 77, 135, 149
 neglect of water recharge 154

Grossholtz, Jean 140

Groups of people, types of
 (according to Kumarappa), i.e.
 "animal," "human", "advanced" 42

Groundnuts 183-84

Growth
 economic
 capital-intensive 118
 lasting indefinitely 122, 137
 supported by the Earth 165
 forced industrial 161
 individual human, due to energy
 provided by nutrients 145
 of British industrial towns,
 like mushrooms 170
 of industrialization in 19th-century
 Europe and the USA 185
 of money-exchange 186
 of a rootless proletariat 131
 of urban capital 137

Gruchy, Allan G. (78, 122: *GCT, GMT*)

Guha, Ramachandra xiii,
 (54: *GAM*), (89: *GPI*)

Gujarat 23, 38, 98, 182
 Socialist Conference 33
 Vidyapith 23, (144)

Gujarati 117

Gujral, M. L. (160: *GEF*)

Gulf (metaphorical) between
 what backward cities import
 and what they can replace
 with their own production 138

Gupta,
 Devendra Kumar xiii, 52
 Shanti S. (89: *GEP*)

Gur 31

Gurdjieff, George Ivanovitch 133

Gymnastics, Gymnasts 93

Hackett, Steven C. (129: *HNE*)

Haeckel, Ernst 83

Hahn, Frank (2: *HEM*)

Hair-oil 184

Hallmark of capitalism 130

Halperin, Sandra (156: *HMC*)

Hamburg 133

Hammond, Barbara (68: *LHS*)

Hand(s)
 factory viii, 34
 invisible vii, 13, 17, 58,
 60, 74, 78, 89, 95, 116

"Hands-off" ideological concept
 of humanity's relation to
 the rest of Nature 153

Handcraft system 19, 92;
see also Cottage industry

Hand-loom
Board of India 118
weavers/weaving 69, 106, 108, 118

Handmade
cloth: *see* Khadi
paper 38, 144

Handspun yarn as medium of exchange 189

Hard-to-face ethical dilemmas 136

Harijan (98: *HA*)

Harmony between capital and labor 106

Harper's Magazine (148: *BLE*)

Harshness,
moral 143
physical, to babies 150

Harvard University xiii, 2, 13, 122, 156

Hausman, Daniel M. (60: *HIS*)

Havoc 97

Hatred ix, 179

Hay, cut at the right time 95

Hay, Stephen N. (90: *HJI*)

Hayek, Friedrich August von (114: *HFC*),
123, 150

Hazards, occupational 178

"HB-Faber" 50

Healing of socio-economic "organisms" 138

Health 80, 138
-care 56, 120
insurance 61
planning 126
impairing
overwork 159
pollution 85-86, (129), 153, 156-57
of laborers 178

Healthy
attitudes toward work 125
constituents of work 45
cynics, growlers and grumblers 169
economies 96
exercise 107
living 177
metabolism and body-development 145

"Healthy and Unhealthy Spirit
Communion" 168

Heaven 90

Heavy
industries 48, 51, 54, 105-06
work schedule 125

Hegelian dialectics 116

Heidelberg 17

Heinsius, Theinrod (71: *HVW*)

Helping people do better
that which they are already doing 132

Hempel, Gotthilf (153: *FHS*)

Henderson, Hazel 142

Hereditary skills 92

Herodotus 107

Hero-worship 152

Hideous surroundings 103

Hierarchically superior groups 142

Higginbottom, Sam 178

High
costs of promoting cottage industry 126
cuisine 151
-fashion clothes 151
income-elasticity 156
industrial costs in Britain 178
infant mortality 170
prices in relation to
aggregate money supply 180
salary (for Kumarappa) 23
-stake risk(s) 159
tariffs 180
tax-rates for the rich (14), 125
-tech
Green Revolution 154
society x

Higher
education 23
human faculties 134
level of consciousness 131
love 167
ratio of unemployed persons in relatively
prosperous post-war economy 173
salaries 118

Hill, Kenneth (120: *APF*)

Hillel, Daniel (85, 153: *HES, HOE, RHC*)

Hills, clouded (in England) 83

Hindi 53, 55, 100, 104

Hind Swaraj 104

Hindu, The 37

Hindu
belief in the soul's
divinity 116
transmigration and rebirth 112
religion and economic
backwardness 180
terminology 93, 97, 116

Hindustan Association of America 8

Hindustani 143

Hinterlands of cities 137, 148

Historical
analysis and perspective, mitigating
moral dualism 148
assessment of the 20th century 165
school of economic theory,
see Kathedersozialisten

Historic reconciliation of local and
global economic organization 152

History
of the Earth 129
of ecological economics 83-88,
129-36, 152-53

History (*cont.*)
of India's public debts and credits 47
inevitable (according to Marxists) 116
modern European (as of 1932) 174
related, like politics, to economic
structures 124

*History and Status of
Landlords and Tenants in
the United Provinces (India), The* 181

Hoarding money or gold and/or investing
in ornaments 82, 173, 180, 187

Hobson, John 20, 60, 80

Hodgson, Geoffrey M. (78: *HII*)

Hoerber, Sisanne (161: *RPL*)

Hogg, William R. (10: *HEF*)

Holdren, John P. (37: *RMM*), (153: *EME*)

"Holier-than-thou" attitude 52, (143)

Holiness 168

Holland (in the Netherlands) 179

Holland, W. E. S. (11: *HEI*), 171

"Hollow ring" (of moral injunctions
by people callous to suffering) 121

Holm, Richard W. (153: *EME*)

Holmes, Frederic W. (84: *HLJ*)

Holy Lamb of God 83

Home
charges 64
-grown traditions, morality, and
principles of action 128
industry 51
life in India 8

Homespun goods 82; *see also* Khadi

Honest exchange (more, according
to Kumarappa, than just a mutual
transfer of material values) 185

Honesty 143

Hoover, Herbert 9

Hope, illusory 33, (159)

Horabin, James Francis 29, 174-75

Horse
-tongas replaced by rickshaws 187
-trading (political) 55

Horticulture 131

Horton, Walter M. 181

Hospitality 82

Hospitals 104

Hotelling, Harold (75-76: *HEE*)

Houses, housing
AIVIA models 32, 144
classified as consumer goods 106
designed by the owners 44
in England, for factory hands 44, 123

Houses, housing (*cont.*)
in India
rural 37, 45, 56, 99, 186-87
urban, for industrial labor 176
in New Delhi 101-02
in poor countries, paid for by loans
from the World Bank 138
in Scotland 170
in Sweden, subsidized 124
in the USA for the homeless 123
in the USSR 175

House of Commons 92

"Houses" (metaphorical, in Kumarappa's
theory of culture) of "imitation,"
"adoption" (from foreign culture),
"material creation," "social inno-
vation," and "sublimation" 43-44

Household(s) 58, 93-94
services provided by women, thereby
pacifying the male labor-force 140

Housewives
adding to national material well-being 95
subdued and subjugated 118
prosperous 177

Hovels near palaces in New Delhi 102

Huge sums lost by gullible investors
due to prestige of Nobel
Memorial Prize 128

Hughes, Grace 5

Humanism, Humanists xiii

Humanity, Humankind x-xi, 11,
41, 76, 101, 114, 130
and machines 175

Human
adaptability 174
body 145, 168
capital 73, (97), (100), 117
character 133
comfort, promoted by the
Industrial Revolution 170
capital (73), 86, 117
development 115
domination over
circumstance 121
Nature 132
energy 157
life, material aspects of 60 *et passim*
life-style x
mind 120
nature 17, 80
organism 158
population explosion 126, 154-55, 165
resources 117
rights 165
species 164
spirit strengthened by struggle 167
tragedy 164
values 133, 164

Humans
competing (in human economic
activities) with beasts of burden 187
disease-ridden 86

- Humboldt University 32, (133)
Humus 179
Hungary 1
Hydroperoxy radicals 134
Hyderabad (in India) 65
Hygiene 56, 62, 142, 177
Hypocrisy 104
Ice cream 142
Iconoclastic economic thought 13
Ideological
 drift to brutal solutions 148
 spin in technical terms 146
Ideologies 1-2, 121-24, 145, 153
 totalitarian 165
Idiosyncrasies in modernization 163
Idleness 104
Ignorance
 and fatalism 176
 of fatal consequences 129
 of Hindustani 143
 of market conditions 180
 of future generations' preferences 122
 willful, of scientific knowledge 128
Illegal trade unions 170
Illness 103, 142
Illumination, allegedly lightening like,
 of insights from Hazel Henderson 142
Illusory (*see also* Delusions)
 efficiency 115
 historical analogy 157
 hope 33
 increased productivity 137
 powers 132-33
 view of problem of production 133
Immature culture 115
Imbalances
 biological 153
 economic 134-35, 137-38, 152
Impeccable
 economic logic, according to a
 confidential World-Bank memo 156
 mastery of relevant scientific
 information 130
 wisdom, unchallenged yet illogical,
 meretricious and dangerous
 (according to Galbraith) 123
Imperative, categorical (Kantian) 117
Imperialism 20, 22, 40, 42, 54-55, 177
 based on consigning to subject races
 the relatively unremunerative task
 of producing raw materials 185
Imperial powers
 imposing colonial customs duties 180
 shaping conquered territories
 into supply regions 137
Imperishable gold 176
Implicit ethical precepts in ostensibly
 neutral orthodox theory (80), 124
Importance of agriculture 144, 165, 179
Imported
 bio-mass and sink capacities 135
 concept of socialism (in India) 160
 German pencils (in India) 50
 goods in India and the USA, assessed
 differently for customs duties 64
 manufactured goods in India
 vis à vis exported raw materials 183
Import-replacing 137-38, 161
Impossibility, Impossibilities
 denied in general *a priori* 167
 fiscal 102
 of eschewing violence completely 155
 -theorems 119
Imposing social order from above 151
Impoverishment amidst plenty 174
Improvements in rural productivity
 without prior city development 139
Improvisational drift (economic) 139
Inability (capitalist) to set
 limits on economic activities 141
Inaccurate socio-economic statistics 127
Inadequate
 drainage 154
 leadership of pioneering
 small-is-beautiful movement 165
 transport facilities 120
Inappropriate though theoretically
 appropriate village technology 138
Incipient (*ca.* 1915) domestic order:
 "electric, hygienic, eugenic!" 177
Income(s)
 -elasticity 156
 national 182
 per-capita 22, 24, 38, 164, 182-83
 unearned 57, 180
Increased morbidity and mortality 156
Indefinitely (supposedly) lasting
 future of human life 165
 economic growth 122
India, *A Foreign View* 29, 176
India in the Victorian Age 63-64
India
 accepting economic checks and safe-
 guards imposed by Britain 173
 developed to suit English eco-
 nomic needs 172
 perhaps the poorest country
 in the world (*ca.* 1935) 171
 prosperous or poor? (*ca.* 1935) 180
 shipping, in the 19th century, into the
 role of supplying raw materials
 to Europe and America 185
 21st-century 157
Indian
 army budget (*ca.* 1925) 171
 borrowing of vast sums 127
 colonial government departments
 ordering supplies from abroad 184
 Constitution 53
 Council for Cultural Relations xiii
 distrust of the British 172
 economic expansion, 19th-
 and early-20th-century 172
 colonial civil service 4
 -English anonymous author 3
 historical experience, modern ix
 history, unique course of 127
 Institute of Technology viii
 internal market 185
 National Congress 27, 30, 32, 47, 176
 opposition to the Rowlett Act 171
 population
 explosion 111, 126, 154-55, 165
 policy 118, 126
Indian Economic Problems... 179-81
Indian Home Rule: see Hind Swaraj
Indian Journal of Economics 75
Indian Outlook, The... 10-11, 171-72
India under Ripon 29
Indian subjects regarded as good, in con-
 trast to evil British imperialists 147
India's
 alleged salvation 104
 economic problems (*ca.* 1942)
 and unique history 127, 182-89
 exports and imports 24,
 36, 51, 64, 108-09, 161,
 180-81, 183, 185-86, 188
Indirect taxation 180-81
Indiscriminate
 ecological degradation 128
 use of
 fertilizers 154
 pesticides, fungicides
 and herbicides 153
Indispensable goods (such as service-
 able water), depletion of 157
Individual
 advantage 58
 food commodities 145
 freedom 121
 human organisms 158
Individualism, narrow 124
Indulgence, sexual 112
Industrial
 accidents 178
 civilization, modern 104
 development 172
 effects of public borrowing 172
 growth
 forced 161
 discouraged in colonial India 183
 19th-century Western economic 185
 India 176
Industrial (*cont.*)
 organization, "orderly"
 development of 173
 profits, varying 178
 progress in India 176
 Revolution vii, 8, 22, 170
 self-reliance in India 161
 status of England, funded
 by capital from India 22
 strife 93, 117
 monopolies, British 18
 towns growing like mushrooms 170
 use of minerals 132
Industrialists considered evil 147
Industry, industries
 centralized, accumulating wealth
 and distributing it badly 188
 conducted with ethical standards 178
 controlled in wartime 173
 dirty, migrating to
 less developed countries 156-57
 expanded in wartime to secure
 a volume of production soon
 thereafter no longer wanted 173
 heavy 48, 51, 54, 105-06
 honest, protection of 176
 large-scale viii, 48-49, 105
 local 174
 national 49
 small-scale 48-49, 115, 162
 steel 176
 subsidiary, for farmers 24
Industry and Trade 74
Ineffective campaigning against
 poverty, illiteracy and disease 161
Inefficiency of big factories 148-49
Inequalities, gross economic 61-62,
 114, 140
Inevitability (alleged) of history 174
Infant
 industries 183
 mortality 170
Inferior
 goods 5, 186
 minds 169
 peoples, races 170, 172
Inflation
 in England 178
 extreme in India due to deliberate
 British-government policy 111
 gradual fixed-rate 175-76
Influence of religion 170
Infrastructure, rural 51
Infrequent luxuries, charm of 142
Ingenious improvements in
 rural productivity 138
Inherited vocation(s) 91, 139, (156), 162
Initial stages of processing to convert raw
 materials into finished products 184

- Initiatives, individual, inhibited by communal ownership 40
- "Innocent, contented" agricultural work 97
- Innovation(s), technical, normally urban, yielding improvements 137, 139
- Insecticide substances in leaves 144
- Institutional perspectives 31, 39, 79-80, 120, 122, 147, 164, 180, 187
- "Instrument of history" (Britain) 116
- Insurance 61, 159, 173, 180, 185
- Insurrection 101, 175
- Integration
ecological i
of economic with genuinely scientific knowledge 164
of India into world capitalism 159
of national economy, by planning 126
- Integrity, human, allegedly lost due to over-specialization 131
- Intellectual
effort of inventing napalm 147
freedom 178
inferiority, caused allegedly by lack of purpose in life 169
labor 101
life, intense 132
- Intensive
agriculture 126
industrial use of capital 118
labor 118, 161
- Interests
British, limiting the expansion of the Indian economy 171
middle-class 61
public 58, 138, 157
vested, against environmentalism 128
of women 178
- Interest rates 24, 82
- Interference
bureaucratic 172, 175
political 124
- Intermediate
tenants of land 50
technologies 132
- International
commerce 149
ecologically unsustainable 135-36
in slaves 171
in weapons 149
competition 164
Economic Association 121
loans supporting education 138
- International Review of Missions* (11: *IRM*)
- Internment of Schumacher 133
- Intrinsic human rights 157
- Invasive medical procedures 158
- Invention(s)
American 148
of napalm 147
of small-is-beautiful ideas 165
of theoretically appropriate but really inappropriate village technology 138
- Investment
and consumption patterns 77
in human beings (other than slaves) 73
in India, guaranteed profitable 66-67
in personal ornaments 82, 173, 180, 187
- "Invisible Hand" vii, 13, 17, 58, 60, 74, 78, 89, 95, 116
- Iron 88, 145, 176, 188
- "Iron Law" 59, 74
- Irreplaceable natural capital 133
(but see also Substitutability)
- Irrigation 57, 144, 153
Department (Indian) 24
- Islamic economics 163
- Islands, oceanic 129
- Isms: see Altruism, Anarchism, Anti-imperialism, Atheism, Bimetallism, Buddhism, Capitalism, Collectivism, Colonialism, Communalism, Communism, Conservatism, Consumerism, Despotism, Determinism, Ecofeminism, Ecomarxism, Empiricism, Expansionism, Fascism, Fatalism, Feminism, Gregarianism, Hinduism, Humanitarianism, Imperialism, Individualism, Industrialism, Institutionalism, Ku Klux Klanism, Liberalism, Localism, Marxism, Militarism, Modernism, Nationalism, Narodism, Nazism, Pantheism, Patriotism, Puritanism, Roman Catholicism, Socialism, Terrorism, Unionism and Villagism
- Jacks, Graham V. (179: *JWR*)
- Jacobs, Jane 136-40, 170
- Jafri, N. A. 181
- Jaggery 180
- Jail terms 2, 10, 25-26, 39-40, 45, 47, 147
- Jain(s) 92, 134
- Jamborees of the British Labor Party 84
- Japan vii, 7, 39, 43, 52-53, 108, 170
- Jathar, Ganesh B. (28: *JBI*)
- Jeans, James 29
- Jerusalem 83-84
- Jesus 2, 40, 43, 83, 103, 168, 170
- Jevons
H. S. 74-75, 98-99, 178
W. S. 17, 72-73, 84, 157
- Jewels 180
- Jewish merchant and sage 96
- Jha, Prem Shankar (118: *JES*, *JOS*)
- Jharkhand Journal of Development and Management Studies* (144: *JJD*)
- Jihad 90
- Jimmies, used productively by burglars 13
- Jingles, commercial 71
- Jobs
in the Community Development Program for those who had not qualified for higher administrative service 161
in import-replacing cities 137-38
- Joint family system 9, 40, 80, 180
- John (the evangelist) 4-5
- Jonung, Lars (123: *JSS*)
- Jorgensen, E. W. & H. I. (78: *JTV*)
- Journalist(s) 79, 100, 105, 122, 175
- Journal of Economic Perspectives* (161: *DRP*)
- Joys x, 45, 62, 88, 90
- "JP" 33-34, 53, 132, 151
- Judgement
in regard to oneself 157
required (along with intelligence) by complex machinery 73
- Judge(s)
congratulating Kumarappa's prosecutor for expertise due to Kumarappa's guidance 111
upright, shot productively 13
- Jugglery, sophistic, in figures 99
- Junk bonds 128
- Justice (in the sense of fairness)
93, 95-97, 150, 167-68, 172, 186
in barter 110
in evaluating H. J. Davenport 14
inherent human sense of 120
see also Soul, divine
and prosperity 16, 60, 96-97
in Sweden 123
- Justifying
additional Swedish social reforms 124
the Brahmins' calling, by having them teach in primary schools 24
the British hegemony in India 102
capital-intensive growth (supposedly to generate employment) 118
employment: see Investment
human development 121
interest 180
private property 69
rent 180
taxation 180
the World Bank's mission 138
- Jute 176
- Kaira 98
- Kakotopias 177
- Kale,
F. S. 181
V. G. (28: *KIE*)
- Kaltschmidt, J. H. (71: *KVW*)
- Kannada 55
- Kant, Immanuel 90, 117
- Kapp, Karl William 142
- Karma 90, 116,
- Karnatika 55
- Kaur, Rajkumari Amrit 155-56
- Kathedersocialisten 17, 19, 59, 61, 76-77, 172
- Kautilya 16
- Keen, Steve (60, 74: *KDE*)
- Keer, Dhananjay (15: *KAL*)
- Kellogg Pact 174
- Kennedy,
I. R. (153: *KAS*)
John 122
- Kerala 1, 38, 53, 55,
- Kerr, Clark (73: *KMM*)
- Keshav & Iyengar (28: *KIR*)
- Keynes, John Maynard 47, (72: *KEB*), 75, 80, 82, 123, 130, 136, 158, 164-65
- Keynesian economists after Keynes 72, 82, 136
- Khadi 50, 54, 104, 107-08, 180;
see also Spinning
- Khadialpura 25
- Kher, Vishwas B. (89: *KGA*)
- Kibbutz, enlightened (as a mistaken metaphor for the capitalist world) 149
- Killing
animals dangerous to human life 155
the goose that lays golden eggs 102
see also Judge(s), upright and War(s)
- Kindleberger, Charles P. (60: *PEH*)
- Kingdom of God is Within You, The* 62
- Kitchen(s) 95, 177
utensils 104
- Klare, Michael T. (34: *KBO*, *KRW*)
- Knies, Karl 17
- Knightly varna 95
- Knitting 105, 107
- Knowledge
advanced, showing India the way to prosperity 179
better if international, not just local 82
demanded more and more in modern times (72), 170
disjointed in Western culture 10
of economic realities 144-46

Knowledge (*cont.*)
 forbidden 103
 scientific, 160
 that laboratory results are sometimes
 invalid in field conditions 179
 sought from the USA 91
 willfully ignored 128
 integrated into open-system
 economic theory 160, 164

Knies, Karl 17, 19-20

Kölnische Zeitung 175

"Komponieren" (the German word) 71

Königsberg Cathedral 90

the Koran 90

Kovel, Joel (87: *KEM*)

Kropotkin, Pyotr 31, 63, 115

Ku Klux Klan 6

Kumar, Satish 134

Kumarappa allegedly
 able to "meet orthodox econo-
 mists on their own ground" 162
 a good man but not an economist 1
 the man who "formulated" or "sys-
 tematized" Gandhian economics 89
 a man who misconstrued economic
 issues by posing the problem of cen-
 tralization vs decentralization rather
 than that of private vs social owner-
 ship of the means of production 33
 so significant as an economist that one
 shouldn't call him just a Gandhian 1

Kumarappa's
 academic studies
 in London 4, 163
 in Madras 3, 11, 102
 in the USA
 at Syracuse University 6-7
 at Columbia University 7-22, 163
 in contemporary international
 economic problems, "social
 economics", and trusts 7
 in the history of
 economic theory 16-17
 monetary and credit theory 7
 in the pecuniary organization
 and control of modern
 economic society 14
 in public finance 16
 in sociology 7-8, 27, 77
 vigorously disagreeing with an
 economics professor (who
 nonetheless rated him A+) 14
 producing an "unusually
 able" graduate thesis 16

accusation that Gandhi
 overemphasized khadi 108

adumbration of ecosystems 41

advocacy of
 decentralized production
 of consumption goods 35, 49
 an ecologically oriented populism 89
 eliminating "intermediate tenants" 50

Kumarappa's
 advocacy (*cont.*) of
 local rural coöperatives and small-
 scale pilot projects in balanced
 agricultural diversification 46
 maintaining to some extent a state
 monopoly of foreign trade 47
 a minimum-wage law for farmers 50
 paying government officials partly
 in cash and partly in kind 46-47
 provincial boundaries determined by
 river valleys and watersheds 55
 the use of chemical fertilizers 38
 alternative to exclusively monetary
 economic reckoning 50, 52, 164
 American professors 6-22, 24, 28-29,
 61, 75, 77, 88-89, 91, 163, 172
 analogies between his own work
 and medical work 37, 146
 anticipation of
 Barbara Brandt's ideas 142
 the campaign in advocacy of
 breast-feeding babies 140
 some of Gunnar Myrdal's
 methodological points 127
 some of Schumacher's views
 and formulation of them 133
 Amartya Sen's institutional finding in
 regard to great famines 120, 164
 appeal to fear as well as to love 158
 arguments
 bearing the marks of
 the Indian experience ix
 doing without unnecessary psycho-
 logical doctrines 158-59, 163
 similar to some by Pigou 75
 attempt (foiled by a guard) to ride in a
 bullock-cart to Teen Murti House 50
 attitude toward Keynes 47
 aura of moral smugness 143
 awareness of ecological depletion 88
 baptism 4
 books 4, 17-26, 29,
 36-37, 40-45, 47, 49-51
 brothers 6, 40
 chicken farming (as a child) 4
 classification of economic activities
 into (four or) five types 14,
 39-42, 147, 163
 co-founding (1952) of a politically
 oriented "Society for Economic
 Equality" 53-54
 collaboration with
 four other Indian economists 39
 Gandhi 1, 23-49, 143-44
 college education 4, 6-7
 commitment to
 mitigating rural unemployment 36
 normative economics 59, 146, 164
 concept of relative permanence 40, 48
 counterproductive rhetoric 143, 165
 criticism of Nehru's economic policies,
 echoed by later writers 51, 54,
 125-26, 160-62
 death 57
 devotion to serving the poor 98, 143
 disagreements with Gandhi 91,
 108-09, 113, 162-63

Kumarappa's
 distinctions between
 "animal", "human" (live-and-let-live),
 and "advanced" human groups 42
 home industry, village industry
 and cottage industry 51, 164
 contemporary Indian life-styles favor-
 ing cultural (1) "imitation" or (2)
 "adoption", (3) competitive "mat-
 erial creations" (such as factories),
 (4) drastic "social innovation" or
 (5) Gandhian "sublimation" 43-44
 needs and wants 142
 renewable and non-renewable
 sources of raw materials
 and consumable energy 41
 dualisms 36, 41, 79, 147
 overcome to some extent 42-43, 147
 early
 experiences in keeping accounts 4
 exposures to the concept of trusteeship
 4, 11, 68, 102
 essays, as a college student, on
 financial panics and currency control 7
 tax-exempt securities 6-7
 estimate of how much money and
 labor would be needed to supply
 India's requirements of cotton 119
 exhibition in 1936 at Lucknow 32
 expertise in accounting 4, 6, (27),
 29-30, 47, 148
 failure to
 take from Keynes and Pigou
 some points that could
 fit in with his ideas 165
 see that the population explosion was
 becoming sharply aggravated 165
 familiarity with writings by
 Henry Carter Adams 29, 172
 W. R. Aykroyd 178
 Charles Whiting Baker 29, 173
 Shridhar Govind Beri 28
 Hubert Blake 29, 173
 William Blake (maybe) 219
 Wilfrid Scawen Blunt 29
 a "British Indian" 29, 172-73
 Norman S. Buck 28
 Warren B. Catlin 178
 Sydney J. Chapman 28
 Malcolm L. Darling 181
 B. Das 181
 H. J. Davenport 14
 Gerhard Dobbert (ed.) 29, 175
 Romesh Chander Dutt 23, 65
 Fred Rogers Fairchild 28
 Vergilius Ferm 37
 Daniel J. Fleming 9
 Edgar Furniss 28
 Patrick Geddes 29, 177
 Silvio Gesell 29, 175-76
 Sam Higginbottom 178
 John Hobson 20, 60
 W. E. S. Holland 171-72
 James F. Horrabin 29, 174
 Walter M. Horton 181
 N. A. Jafri 181
 Ganesh Bhaskar Jathar 28
 James Jeans 29

Kumarappa's
 familiarity with writings (*cont.*) by
 F. S. Kale 181
 V. G. Kale 28
 Keshav & Iyengar 28
 Pyotr Kropotkin 63
 S. Lakshminarasiah 179
 Lin Yutang 37
 Harvey L. Lutz 6
 Kenneth MacLennan 10-11, 169-71
 Syed Mahmud 181
 Harold Mann 28
 Thomas Mann 37
 Alfred Marshall 74
 G. C. Mukhatyar 28
 Prentice Mulford 5, 167-69
 B. K. Nadhan 181
 Ehrenfried Pfeiffer 179
 André Philip 29, 175
 J. S. Poonia 28
 Bertrand Russell 29
 Arthur Salter 29, 174
 Bhalachandra G. Sapre 28
 Jadunath Sarkar 28
 E. R. A. Seligman 29, 172
 K. T. Shah 181
 André Siegfried 178
 John Strachey 29, 176
 Rabindranath Tagore 10, 26
 M. Vivesvaraya 181
 H. G. Wells 29, 175
 John Wild 5
 first book 17-22
 first meeting with Gandhi 23
 knowledge of the rural economy
 in India: 23-25, 37-38, 47,
 49-50, 56-57, 127, 144-45, 164
 health declining in the 1950s 47, 51, 55
 historical status in regard to
 Gandhian economics 1, 89
 honesty 143
 inaugural address at an exhibition
 in 1930 of Indian products 26
 ideas not taken seriously by Nehru 160
 implicit disagreement with
 Galbraith's view of industry 123
 the neo-orthodox view of needs 75
 Pareto's view of what is best 80
 inadequate leadership of the small-is-
 beautiful movement in India 165
 incipient integration of economic with
 genuinely scientific knowledge 164
 indirect influences from
 Gokhale 63
 Locke 69
 Naoroji (23), 63
 Tolstoy 62
 Veblen 77-78
 informal
 discussions of how to distinguish
 between acceptable and unaccept-
 able kinds of mechanization 144
 rule of thumb for gauging the local
 effectiveness of community-
 development programs 121
 insight that to integrate economic with
 scientific knowledge entails taking
 ecological pollution seriously 164

Kumarappa's (cont.)

institutional perspectives 31, 39,
79-80, 120, 122, 147, 164, 187
jail terms 26, 28-29, 37, 39-40, 45, 147
lack of
 fluent Hindustani or Gujarati 23, 143
 rich friends 102
lectures prepared (1928) for Americans 8
life in
 Bombay 6, 23, (30)
 London 4-5
list of amenities accorded to modern
 factory workers in England 44, 123
lonely (among economists) insistence
 that primary schooling ought to
 be a high priority in India 165
membership in the
 All-India Education Board 37
 Economic Program Committee 47-48
 National Planning Committee 36
metaphors of
 a bullock's nose-string 45, 123
 wolf-packs preying on peaceable herds
 26, 36, 147
mistaken sense of how much arduous
 physical work the techniques fostered
 by the AIVIA should entail 159
misunderstanding of the normal meaning
 of the word "predatory" 41
names 4, 10
nickname ("Colonel Sahib") 30
notebooks compiled in jail 28-29
one-room houses 32, 99
papers now in the Nehru Memorial Library
 and books in his last dwelling 2
parents and paternal grandfather 4
participation in pacifist congresses 47
personal relations with
 the Bishop of Calcutta 25
 Chester Bowles 55
 Mahadev Desai 20
 Gora 91-92
 J. P. Narayan 33-34, 72
 Nehru 143
physical work 104
place in the history of open-system
 economics 129, 134-36, 152-53
reaction to burying [the ashes of] Gandhi
 "in the ground, not in our hearts" 51
refusal to let earthquake-relief funds
 pay for Gandhi's extra expenses 30
rejection of some of Davenport's ideas 14
religion 4, 25, 109, 143
reports in behalf of the
 Indian National Congress committee
 (1931) on financial obligations
 between Britain and India 27
 Indian National Congress committee
 (1948) on agrarian reforms 49-50
report (1956) on how the Community
 Development Program was being
 implemented in 27 villages 56-57
resignation from the
 National Planning Committee 36
rhetoric 7, 27, 34
role(s) in
 the AIVIA 30, 63, 90
 an earthquake-relief effort 30

Kumarappa's

role(s) (cont.) in
 the Freemasons (probably) 6
 the munitions industry 5, 34
 editing *Young India* 17, 25-27
 the YMCA 6
salaries for his Gandhian work 23, 98
second book (1931) 23-25
several books issued in 1947 47
silk trousers (1929) 23
simple mathematics 164
sisters 8
slight interest in certain concepts:
 an ancient "golden age" in India 162
 the Earth being always able to
 provide for everyone's needs 113
 Keynes's demand-side insight 164
 market equilibrium 73
 trusteeship (as set out by Gandhi) 102
"small-is-beautiful" arguments 39, 46,
 48, 52, 148-51; *see also* AIVIA
strict administration
 of the AIVIA 31-32, 144
 of an earthquake-relief fund 30
struggle, in a period of political turmoil,
 to achieve an economic ideal still
 today needing maturation 144
support (while still a child)
 of an orphaned schoolmate 4
synopsis for a course in economics 27-28
tailor-made (1929) loin-cloth 23
telegram (1952) from JP 34
thinking in the Western tradition
 and based on no one religion
 or psychological doctrine 163
third book 36-37
trips, after World War II, to Europe
 and to the Far East 47, 52-53, 55
understanding of the ethics ca.1920
 of British business practices
 among fellow Britishers 5
unfamiliarity with
 the word "ecology" 83
 Marx's concept of alienation 70
 the "Pareto optimum" 80
 Pigou's ideas 17, 39, 81, 154, 164
 Robinson's writings 136
use (like Amartya Sen later)
 of the concept of letting the
 "devil take the hindmost" 40, 120
use (unlike Amartya Sen) implicitly
 of a concept of alienation 71
originality of expression 162
views in regard to
 allegedly characteristic attitudes
 (conscious or unconscious) of
 different nations to the
 economic aspect of life 39
 America's
 financial imperialism (ca.1945-50)
 42, 55, 109
 greatness (ca.1930) due to
 her internal trade 26
 role in Nehru's Community
 Development Program 54
 the importance of agriculture 144
 barter 35, 111
 capitalism 115

Kumarappa's

views in regard (cont.) to
 cartels 42
 caste and/or the doctrine of
 inherited vocation 9, 31, 91, 162
 certain basic orthodox precepts 58-59
 channeling purchasing power away
 from people for whom it buys
 necessities and toward people
 for whom it buys mere luxuries 35
 chemical fertilizers 38, 57, 88, 121,
 130, 153, 162
 Communism 34, 44, 49, 42
 division of labor 45
 the doctrine that future generations
 are bound to be able to solve
 any big ecological problems 164
 economic planning
 to yield wealth by rationally
 coordinating employment,
 techniques and capital 36
 with "predetermined outputs" 44
 theories featuring elaborate
 mathematical formulae 39
 evaluating local Community
 Development programs 29, 121
 famines and their prevention 120
 feeding babies 140
 five-year plans 139, 151-52
 free will 41
 Gandhi's
 insights into economics 27
 ruralism 26
 view of money-exchange 91
 high inflation 111
 how India should cope with Britain's
 manipulation of tariffs 26
 an increase in the number of million-
 aires in India 39, 186
 Indian women 8, 35, (47)
 money 91, 116, 162
 rural development in India
 soon after World War II 45-47
 some of Kropotkin's ideas 63
 mass-production and its economies of
 scale viii-ix, 5, 34, 80, 106,
 108, 115, 119, 148-49, 164
 mathematically formulated
 modern economic theory 145-46
 "money-crops" vs "food-crops" 28
 nationalized industries 49
 ownership of land 50
 payments in kind 31, 35-36, 111
 population 154, 157
 public-utility concerns 49
 self-sufficiency 80, 147
 of rural units 39
 soil analysis 57, 88, 129-30
 standards of living 44-45
 tax exemption 6-7
 unhealthy competition 39, 41, 157
 unproductive shareholders 42
 urban and rural
 cultures and conditions 30-31, 39
 value and valuation 43
 work 45
 and wages, in ecologically
 enduring economic systems 41

Kuran, Timur (163: KGI)

Kysar, Douglas A. (37: KES)

Labor,

abstractly related to commodities 69
arduous 32
best 94
bodily 62, 72, 115
bread- 45, 62, 103-06
cheap 164
child- 79, 174, 176
claims upon (via money) 95-96
conditions 168, 174, 176
cost(s) 74, 183, 186, 188
demand for 94
different amounts required at different
 points in the process of produc-
 tion/distribution 184
displaced 104
 -disputes 101
division of 28, 43, 70
"Dynasty of" 35
exploited 62
a factor of production 28
faithful 96
-force
 big, required for certain
 ventures 49
 male, pacified by sexual
 servants 140
 settled, 140
a foundation-stone of good
 economic planning in India 36
grievances in the USA and Britain 178
"homogenized" 69
indispensable to give value to land 95
-insurrections 101
intellectual 103
-intensive industrial growth 118, 161
joyous and fruitful 62; *see also* Work
(alleged) laws of 93
manual/mechanized 72, 115
mental/muscular 62; *see also* Work
Movement (in India) 176
-organizations 101, 105
ousted because of mechanization 185
Party (in Britain) 84, 92
physical, worthwhile as a way of life 92
-politics in the USA and Britain 178
poor-quality at half price 94
price of 59
-problems 177-79
producing
 alienated things 70, 157
 perishable goods 175
 value 69
-productivity 13, 72
regimented 187
rightly done for a just price 93
sale of 179
-saving devices/machinery 33, 173, 185
social 72
a source of property 69-70
strong when fueled by affections 94
-surplus of (in India) 51, 119, 184
technologies of 118
-theory of value 69-70, 72-73, 111

- Labor** (*cont.*)
- unions 101, 118, 170, 179
 - voluntary 111
 - wages 70, 103, 140, 177
 - at war with capital 169
 - wealth 119
 - by women 140
 - worth its hire 100
- Laborers:** *see* Workers
- Labor Problem in the United States and Great Britain, The** 178
- Lack of**
- adequate economic statistics for colonial India, prepared at periodic intervals on the same basis and principles 186
 - good economic opportunities 183-84
 - uniform treatment of facts whilst deriving statistics from them 182
- Lahore** 176
- Laissez faire** 16, 40, 61, (109), 114, 123, 150
- Lakes and shores** 83, 129
- Lakhs** (i.e. hundreds of thousands) of people 119
- Lakshminarasiah, S.** 179-81
- Lal, R. et al.** (153: *LKC, LKG*)
- Lamb of God** 83
- Lancashire/Lancaster** 11, 108, 172
- Land**
- Alienation Bill 67
 - allotment in historical systems 176
 - arable,
 - per-capita average in India 45
 - organized to yield an adequate vegetarian diet to 100,000 people 46
 - belonging to the Irrigation Department in India 24
 - carefully preserved and justly used 96
 - claiming care and regard 158
 - commercially useful in large estates only if labor can be commanded 95
 - comprised in ecological footprint 135
 - cultivable,
 - due to humus made by worms 178
 - gained by destroying forests 86
 - degraded globally 154
 - dependent in India on monsoon rains 55
 - devastated by floods 56
 - discussed by Schumacher 132
 - ecologically degraded in Europe 84-85
 - in England, green and pleasant 84
 - fertility in India
 - formerly 21
 - now declining 160
 - yielding to saline and/or alkaline deserts 154
 - in fragmented holdings when it was India's main source of wealth 31, 80
 - and-Freedom Movement in Russia 88
 - grants 20
 - the "mother" of wealth 69
 - natural resources of 19
- Land** (*cont.*)
- owners, ownership 17, 50, 101
 - reforms,
 - proposed 48, 50, 52-54, 126, 160, 174-75
 - diluted 50, 52, 160
 - predicted 102
 - realized effectively 53
 - and rent 179
 - resources drained 66
 - revenue 180
 - Russian primeval common ownership of, vs higher form of communist common ownership in USSR 71
 - system, proper 112
 - the locus of fruitful and joyous labor 62 -
 - taxes 21-22, 24-25, 64, 179
 - tenants in the United Provinces 181
 - to be held in India, directly by the tiller under the community 50
 - transport 173
 - yielding
 - cash income to a farmer of wheat and groundnuts 183
 - income reckoned in terms other than of money 183
 - sustenance 158
- Landless agricultural laborers** 118
- Landlords** 101-02
- Large-scale**
- deforestation 154
 - economic failure 126
 - industrial organization 173
 - industry viii, 48-49, 105
- Laski, Harold** 174
- Lassalle, Ferdinand** 59
- Last viceroy** 54
- Lavanam** 53, 103
- Lavatories** 103
- Law(s) and starvation deaths** 120
- "Law(s)"**
- of conservation of energy 88
 - of diminishing returns 179
 - economic 6, 58-59, 93, 95, 179-80
 - Gresham's 180
 - of karma 116
 - of language 13
 - moral 90
 - of Nature 86, 88, 152, 167, 169, 175
 - Say's 59, 68, 74, 82, 88, 146
- Lawrence, John** (68: *LHS*)
- Lawyers** 95, 104
- Laziness** 45, 104
- Leadership by white Europeans** 170
- Leaking of a confidential World-Bank memorandum** 156
- Learning by doing** 125
- Leaves, liquified, containing naturally insecticide substances** 144
- Lebensraum** 136
- Lebowitz, Michael A.** (2: *LID*)
- Lectureships, touring** (as a means of rural uplift) 180
- Legal**
- claim over other people's labor 95
 - competence in court 111
- Legality causing starvation deaths** 120
- Legislated regulations** 125
- Legislative**
- duty 100
 - enactment 81
 - interference 109
- Leibniz, Gottfried Wilhelm von** 152
- Leipzig** 13
- Lending to Indian peasants** 115, 176
- Leon, Derrick** (62, 92: *LRY*)
- Leontyev, L. A.** (72: *LSC*)
- Lethal by-products of atomic fission, now in the environment** 129
- Letterhead (AIVIA)** 143-44
- Letting the organism cure itself** 153
- Level of water-tables** 160
- Liberalization** 157
- Liberal welfare scheme(s)** 44
- Liberalism, economic** 61; *see also* Laissez faire
- Licensing system** 127
- Liebig, Justus von** 84-85
- Lightening-quick illumination** (allegedly due to reading Hazel Henderson) 142
- Life**
- cycle of organizations 141
 - insurance 180
 - span (individual) 40
 - style(s) x, 43
 - of women 177
- Lighting, bright** 151
- Limbari** 25
- Limitations**
- of indulgence 131
 - of monetary analysis 135
- Limited natural capital** 135
- Limiting our economic activities** 141
- Lindley**
- Ernest K. (78-79: *LRR*)
 - Mark vii-viii, (92: *LCG*)
- Lindroth, Mattias** (136: *ALE*)
- Linguistic bickerings** 55
- Lin Yutang** 37
- Liquified leaves containing naturally insecticide substances** 144
- "Literary" economics** 145
- Literature** 128, 177
- Litigation, an economic drag** 180
- Little fundamental change in former colonies** 140
- Liverpool** 171
- Living**
- conditions 134
 - more than two per room in Scotland 170
 - on capital (instead of on income) 133
 - patterns of the rich 127
 - without war 131
- Load limit, agricultural** 179
- Loans to poor countries and/or to regions lacking vigorous cities** 138
- Local**
- consumption/resources ix
 - coöperatives 46
 - economic creation of a cornucopia of satisfactions 151
 - famines 120
 - government
 - borrowing 172
 - starved of funds 161
 - industries 174
 - landlords becoming barbarians *par excellence* 148
 - monetary currency 141
 - opportunities for employment 151
 - transportation 131
- Localism, Localization** 109, 177, 179
- Locke, John** 69
- Locusts** 111
- Logic** 95, 119
- Loin cloth, ordered made-to-measure** 23
- Lomborg, Bjorn** (37: *LSE*)
- London 4-5, 21, 27, 58, 84-86, 174, 179**
- School of Economics 123
- Long**
- haul transportation 131
 - range planning 139, 162
 - run agricultural disaster 154
 - term, objective view of things 159
- Looms** 118
- Loss**
- due to long negotiations about price 176
 - of efficiency, serious in some cottage industries 49
- Lovejoy, Thomas** (37: *RMM*)
- Loving your neighbor as yourself but demanding good first for yourself** 169
- Low-capital-intensive programs** 161
- Low**
- prices related to over-production 180 (*see also* Say's Law)
 - productivity and standard of living 183
 - purchasing-power of most Indians 185

- Lower standards of living due (according to JP) to decentralization 33
- Lowest-wage country the best choice (according to Summers) for toxic-waste dumping 156
- Lucknow 32
- Lucrative nature of academic economics as a profession 146
- Luddites 68, 88
- Luke, Timothy W. (122: *LCE*)
- Lumber rooms 106
- Lunatic asylums 29
- Lutz,
Harvey L. 6
Mark A. (59: *LLC*), (89: *DLE*), (158: *LHN*)
- Kenneth Lux (59: *LLC*)
- Luxury, luxuries 34, 39, 96, 142, 173
among city-dwellers 188
disadvantageous to society 175
- Lytton, Edward Robert Bulwer- 66
- MacArthur, Douglas 131
- Macaulay, Thomas Babington 156, 176
- McAlpin, Michelle B. (21: *MSF*)
- Machines, Machinery viii, 11, 33
complex 73
great 175
heavy 105-06
and modern production, labor, and distribution of wealth 179
- McKay, Mary A. 130 (*MRC*)
- Macleay, J. L. (153: *PMO*)
- MacLennan, Kenneth 10-11, 169-71
- McNamara, Robert 127
- McNeill,
Jim (135: *MWY*)
William H. (148: *MSH*)
- Macro
-ecological degradation, problems, risks 41, 81, 121, 128-29, 152, 164-65
-economics 136
-economic inefficiency of big factories (according to Kumarappa) 148-49
- Made-to-order private goods 151
- Madras xiii, 4, 30, 65-66, 68
- Madras Institute of Development Studies xiii
- Madurai xiii, 2, 4
- Magan Chula and Magan Dipa 38
- Maganwadi 36, 38, 52, 144
- Mahalanobis, Prasanta Chandra 51
- Mahmud, Syed 181
- Maintaining India's financial stability and credit in world markets 172
- Makajans 189
- Making
the Earth uninhabitable 149
the statistics "sing" (Keynes's praise for Schumacher) 130
- Malayalam 55
- Maldistribution, monetary 180 182
- Male dominance 177; *see also* Patriarchy
- Malkani, N. R. (144: *MSI*)
- Malthus, Thomas Robert 17
- Malthusian theory 180
- "Mammon", worship of 33
- Managerial skills 54
- Managers of the World Bank (127), 156
- Management
of the economy 115-16
financial, of wars 172
- Manchuria 170
- Mankind x-xi, 11, 41, 76, 101, 114, 130
as part of Nature 70, 86, 112, 132
- Mann
Harold (28: *MLD*)
Thomas 37
- Manufacture
for export 51
of hair-oil, from groundnuts 184
of salt in ancient Orissa 181
of ships 83
- Manufacturers, National Association of 6
- Manure 23, 56, 85, (144), 179-80
- Mao Tse-Dung 112, 150, 163
- Marching in protest 50-51, 53-54
- Marcus,
Steven (70, 86: *MEM*)
William 150
- Marginal
efficiency of capital 82
utility 72-73
- Margulis, Lynn 146
- Market
-clearing 1
-command over food 120
-economics 134
-equilibrium 73, 123, (134-35), 146, 152, 155
-exchanges 128
-expansion sustained/undermined 164
-system vii
-vicissitudes 94
- Marketable pleasures x
- Marketing
-demonstrations (educational) 180
lag 118
- Markets,
competition for 164
inadequate, flooded with goods 157, 185
- Marriage 23, 40, 187
- Marriage and Morals 29
- Marshes 135
- Marshall,
Alfred 3, 13, 16-17, 39, 72-74, 77, 80-81, 88, (117), 123, 158
T. H. (117: *MWS*)
- Marshall Plan (named for George C. Marshall) 138
- Martinez-Alier, Juan (87-88, 135: *MAE, MEP*)
- Marx, Karl, and/or Marxists
vii, ix, 17, 68-72, 78-79, 85, 96-97, 100, 103, 114-16, 136, 140, 157, 174-76
his and/or their
concepts of
alienation 70, 157
the bourgeoisie 71
Britain's role in India 116
class struggle 59
communist society 114
development 71
dominion over circumstance 121
expropriating expropriators 125
forces of production vii
free and fulfilling work 71
fusion of town and country 85
individualism 121
labor and commodities 69
mankind's destiny 71
Nature 70, 86, 114
the primary importance of making revolution and then of meeting national production goals 85
relations of production vii
the Russian Revolution 71
soil depletion 85-86
value(s) and sources of wealth 70
economics ca.1930 in the USSR 175
precepts abandoned in Sweden 124
use of Hegelian dialectics 116
- Marx's views in regard to
agriculture 85-86
capitalism 71, 85, 115
individuals *vis à vis* chance and circumstance 121
pollution of the Thames 85-86
- Marxists'
abolition of private ownership of the means of production ix
atmosphere of violence 34
devotion and earnestness 52
economic
"militarism" (according to Kumarappa) 34; *see also* 139
mistakes 150
failure to establish freedom ix, 34
land reform in Kerala 53
progressive achievements 34
psychological premisses 116
- Marxists' (*cont.*)
repression (illegal and violent) of Congress Party in Kerala 53
ridicule of concept of trusteeship 101
views in regard to
the AIVIA 33
civilization 114
big factories 72, 115
Gandhian "trusteeship" 101
means vs ends 116
models of the economy 114
Party members/leaders 114-15
the proper economic role of national government 115-16
- "Marxism" (the term) 114
- Mashruwala, Kishorelal G. 47
- Mass
destruction x, 73
production viii, 34, 115
-produced
goods 151
pencils from Germany 50
unemployment 173
- Massacre at Amritsar 176
- Master
and servant 93-94
-processes (economic), urban 137
- Master's master 99
- Matar Taluka 25, 183
- Matches 52
- Material
aspects of human life 60 *et passim*
standards of living 115
well-being in the nation 95
- "Material Mind vs the Spiritual Mind, The" 168
- Materials, raw viii-ix, 34, 41, 48, 56, 109, 134
- Mathematical
economic models, elaborate and/or sophisticated 135, 145-46, 157
exercise based on the idea of a finitely energetic cosmos 116
formula for dealing in junk bonds 128
- Mathematics 1, 39, (74), 82, 145-46
simple 164
- Mathew, E. T. (professor in Kerala) 1
- Mathur, J. S. & A. S. (89: *MIC, MMA*)
- Matthew (evangelist) (7, 60: *MG*)
- Maximizing welfare 149
- Mawdudi, S. A. (163: *MIE, MIP*)
- Mayhew, Anne (77: *MDA*)
- Mazower, Mark (86, 132: *MDC*)
- McKay, Mary A. 130 (*MRC*)
- McAlpin, Michelle B. (21: *MSF*)
- McNamara, Robert 127

- Ongoing survival needs and needs for amenities 142
- Oommen, T. K. (40: *OTA*)
- OPA 122
- Opaque discourse
(by World-Bank economists) 145
- Open
-ended (i.e. not goal-oriented) development 139
-system economics 59, 70, 82-88, 114, 128-36, 152, 155, 158, 164
- Opportunities
and dangers of modernization 163
for full employment 48
for employment bringing an adequate return 183
for personal development and expression 44, 48
- Optimism 123, 175
- Orderly development of
large-scale industry 173
- Ores 87
- Organic fertilizers 23, 56, 85, 144, 179
- Organisms 138
- Organizational considerations 118, 132
- Organizations, social 159
- Organized charity 180
- Organizing
a better banking system 173
farming 179
- Origins and sources of
the wage-working class 178
- Orion* (148: *BLE*)
- Orissa 25, 38, 65, 120, 181
- Ornaments 32, 52, 64, 185, 187
of life 25
- Orphaned school-mate of Kumarappa's 4
- Orthodox economics ix, 2-3 *et passim*;
see Precepts...
- Ostentation in New Delhi under Nehru 54
- Ottawa Agreement 180
- Ounces (of food) daily 46
- Outcastes 11
- Outdoor amenities of affluent living 87
- Outline of Economic Geography, An*
29, 174-75
- Outline of History* 175
- Output
macro-economic 136
predetermined by planning 44
- Ovation, thunderous, accorded by the
American Economic Association
to a female Marxist economist 136
- Over-
-ambitious desires 118
-developed countries 87
-flowing sinks 134
-population 112
-production 105, 179
and low prices 180
-strain of workers 178
-use of limited water resources 154
-work damaging Kumarappa's health 159
-worked domestic servants 118
- Overcoming antagonists' resistance
to Gandhian thinking and feeling 143
- Ownership 132
and enjoyment of the best
things of this Earth 168
of land, private vs communal 50
of large-scale industry in India 48
social, of means of production 33
- Oxford
English Dictionary (134: *OED*)
University 60, 130, 173, 182
Pamphlets on Indian Affairs 182
- Pace of poverty-reduction 161
- Pacifying the male labor force 140
- Page, Kirby 37
- Pain 167-68
- Palace(s) 54-55, 102
- Palpable physical human exertion 159
- Palpably incorrect socio-economic
statistics 127
- Panchayat coöperation 180
- Pandey, Badri Prasad (89: *PGE*)
- Panditrao, Y. A. (89: *PGA*)
- Pansoli 25
- Pantheism 111-12
- Papaya and carrots 145
- Paper currency 175, 180
- Parable(s) 60
- Paradigm, post-modern 141
- Paradigms in Progress:*
Life Beyond Economics 142
- Paralysis of the Aztecs 132
- Parasitic economic behavior
14, 41, 45, 78, 147
- Pareto, Vilfredo, and his
concept of "optimum" 80, 119
- Parida, Gunanidhi (89: *PED*)
- Parikh, Nilam (23: *PLJ*)
- Paris 13, 17
- Parliament(s)
British 92
German 61
- Mining and converting iron ore 188
- Minimum
currency-note denomination 180
institutional standards of ethics for
conduct of industry or trade 178
standards of essentials of well-being 48
- Minister(s) of
Finance 47
Health 126, 155
Industry 50
- Ministry of Munitions 4, 34
- Mint par 180
- Mirabehn (Madeleine Slade) 37
- Misconceptions, psychological (by social
theorists spinning out sophisticated
mathematical models) 157
- Misdirected ingenuity
(in regard to village technology) 138
- Mishra,
Anil Dutta (102: *MGG*)
Pankaj (186: *MWB*)
- Misleading
aspects of monetary analysis 135
statistics 127, 182
- Misra, Ragavendra Bath (89: *MBA*)
- Missionaries 4, 10-11, 178
- Missions of non-profit organizations
fulfilled 141-42
- Misuse of purchasing power 182
- Mixed
economy under Nehru 160
planting 179
uses of space in flourishing urban
neighborhoods 137
- Models, modelling (economic)
closed-system 74, 114
crematistic 157
full vs small 1
open-system 114
rational-expectations 1
Russian 47
- Modern
capitalism, success of 149
caste system 163
contrast (*ca.* 1915) of social ranks 177
demand (*ca.* 1950) 52
famines 120
(fine) arts 165
history (as of 1932) 174
industrial civilization 104
man 132
materialism 133
theories of learning by doing 126
-type conurbations 132
world (*ca.* 1970) 132
- Modernism in the arts 165
- Modernization 163
- Modest material standard, needs 114-15
- Moghul Empire 22
- Mohan, Radhey (89: *RGS*)
- Mohapatra, S. S. 47
- Molasses 31, 46
- Moley, Raymond (78: *MAS*)
- Monetary
reform 173
system 174
vs more broadly economic
analysis 135
aspects of life 60, 146
budgeting 177-78
facts 95
reckonings 87
standards of wealth 20
- Money 91, 135
-and-credit economy 185
-based economy 39, 186
-lenders, lending 115, 176
as favored unit of economic reckoning 50
in the hands of bad men 97
local 141
orthodox economists' regard for 115
precious-metal standards of 175, 180
regarded
dimly by Gandhi 110
more positively by Kumarappa
110, 116
-transactions 186
unstable 177
-wages: *see* Labor wages
- Monopolies 7, 13, 18, 28, 42, 47,
136, 177, 179
- Monotony 79
- Monsoon(s) 20, 55, 65, 184
- Moods 168
- Moral
appeal(s) 116
degradation 176
foundations of
commerce and politics 139
harshness, counterproductive 143
imperative (Kantian) 117
indifference 148
neutrality (alleged) 75
obligations 121
problems 178
reasons, problematic 157
smugness 143
strength 91
values 14, 61, 75, 80, 131,
146, 164, 178
- Moralistic talk 125
- Morality and culture and
intellectual freedom allegedly
more important than material
prosperity and advancement 178
- Morbid local action of riches 96
- Morris, William 33
- Moscow 175

- Mothers nursing their babies 45
Mother-tongues 144
Motivation(s) 58, 169
Mountain springs 86
Mud floor: *see* Clay floor
Muhkattar, G. C. (28: *MLG*)
Mukerjee, Tapan (149: *BEI*)
Mulford, Prentice 5, 167-69
Multi-level yet one-world economy 151
Multiple and diverse experimentation 139
Multiplication des organismes et son rôle dans le mécanisme de la biosphère, La (86)
Munby, Lionel (68: *MLE*)
Municipal corruption 172
Munitions 4-5, 34
Murderous (according to Romain Rolland) excesses of industrialization 105
Muscle-power (human) 32, 62-63
Music, composing of 71
Muslims 106
Must We Go to War? 37
Mute (i.e. animal) "brethren" ministering to human needs 158
Mutual obligations 101
Myanmar: *see* Burma
Myrdal
 Alva 123-25
 Gunnar 122-27, 138-39, 143, 155, 160
Mysore 38, 65, 180
Myth of an ancient golden age 163
Mythri (107)
Nadhan, B. K. 181
Nagari 144
Naïve
 belief that the sea was beyond human ability to despoil 129
 empiricism 123-24
Nakagawa, Thomas A. (150: *NCS*)
"Naked" eye/truth 99, 143
Namorato, Michael V. (78: *NRT*)
Nanda, Bal Ram (65: *NMG*), (106: *NGF, NMN*)
Nanekar, K. R. (89: *NKB*)
Naoroji, Dadabai 23, 59, 63-64
Napalm 52, 147
Napkin(s) 98
Narain, Jai (89: *NET*)
Narayan
 Jayaprakash 33-34, 53, 132, 151
 Shriman 40, (76: *GSW*), (89: *NGP, NPP, NRG, NTP*)
Narodniks, narodism 88
Nasar, Sylvia (128: *NBM*)
Nasty new bacteria and viruses 153
Natarajan, K. M. xiii
National
 Association of Manufacturers (USA) 6
 cabinet (Republic of India) 143
 Christian Party (India) 26
 Coal Board (England) 130-32
 Congress (India) 27, 30, 32, 47, 176
 debts (including those of India while yet a colony in the British Empire) 7, 22, 27, 47, 55, 66, 160, 172, 181
 dividend (according to Pigou) 81
 economic success 149
 Forest Service (USA) 86
 Gandhi Museum (India) xiii
 glory and/or security viii
 League on Urban Conditions (USA) 15
 market economies 164
 material well-being 95
 parliament (India) 55
 Planning Committee (India) in the 1930s 36, 39, 182 in 2004 156
 self-sufficiency 109
 tendencies, economic (alleged), of various countries 39
National Income of British India, The 182
 "National Industries" 49
Nationalism 18, 26, 92
Nationalizing the means of production 125
NATO Advanced Science Institutes 153
Natural
 beauty, desecrated 81
 capital 135
 purpose (of wholesome work) 45
 resources 19, 21, 81, 86
 sciences 82
 wages 115
Natural Economic Order, The 29, 175-176
Naturally insecticide substances 144
Naturalist in the USA (Rachel Carson) 129
Nature x, 10, 40-44, 83, 86, 114, 132, 152
 human 39, 44
 Kumarappa's chapters on 41
 (presumed) way of 44
 "retaliating" 158
Nature's
 balance, being tampered with 129
 larder, being emptied out 130
Navajivan Press 15, 117
Nayak, Pulin xiii
Nayar
 Pyarelal (101), (110)
 Sushila 126, 143, (30, 108, 162: *SNK*)
Nazis(m) 40, 133
Need(s), perceived, felt or alleged
 for agricultural produce 96
 for always more study before taking any substantial measures 128
 for amenities 142
 for answers to questions about economics which everyone except economists are asking 136
 artisans', for materials to work with 186
 basic/primary human 45, 47, 52, 75, 121, 142
 to believe in a nourishing Supreme Power 165, 167
 for biophysical units of measure 135
 Britain's, for India's help in waging war 11, 67, 170
 for capital 119, 184
 for coal 86
 consumer, in the USA 122-23
 decadent capitalism's, for a prop 72
 to defend exhaustible natural resources from reckless spoilation 81
 determining distribution 114
 distinguished from wants 45
 of everyday life 35, 49, 126
 of farmers
 for help against pests 57
 for subsidiary industries to be engaged in at opportune times 24
 on the verge of starvation 184
 for fine rainment, palaces and extravagant furnishings 12
 for food for one's family 81
 Gandhi's, for Kumarappa 23
 Gandhians',
 for humility and open-mindedness in regard to Communists 52
 to get behind the defences of people resisting the truth 143
 genuine human 131
 ministered to by animals 158
 for humane treatment 163
 for imported fertilizer in mid-19th-century Europe 84
 India's,
 to adapt Japanese methods 52
 for dedicated social workers 44
 for educational institutions 187
 for family planning 156
 for governmental aid to service-industries 188
 for grain stocked locally 120
 for heavy industries to be centralized and nationalized 106
 for industrialization 176
 for properly functioning irrigation for water-storage tanks 23, 56-57, 153
 for innovative, better ways of doing things 139
 to be in the path of justice 165
 legitimate 100
 of the local community 151
Need(s), perceived, felt or alleged (*cont.*)
 for occasional luxuries 142
 met by organizations 141-42
 for modifications to Kumarappa's small-is-beautiful theory 147
 objective human 75
 of the people 137
 for personal care 142
 for psychological knowledge 52
 public 122
 to reduce unnecessary consumption 127
 for renewed effort of searching analysis and constructive reform 173
 to replenish the sources that support and sustain us 142
 for social change 17
 true and genuine 131
 voluntarily modest 98, 114
 vs wants 44-45, 142; *see also* Cravings
 for water 56
 for whatever wealth one happens to have 12
 workers',
 to organize themselves into unions 101, 105
 to spend money to satisfy presumably trivial material wants 44-45
 world population's total 113
Neem 31
Negative consequences
 of using money 163
 of the Green Revolution 154
Neglect of water recharge 154
Negotiations about price 176
Nehru, Jawaharlal 36, 48-50, 54, 56, 100, 105, 154, 159-60, 162
 his economic program 160
 and Kumarappa 143, 160
Nehru Memorial Library xiii, 2, 49
Nehru Report (1928, by Jawaharlal's father, Motilal Nehru) 176
Neighborhood economy ix, 151
Neighborhoods, urban, flourishing or dying 137
Neighborly love, cultivated by Kumarappa's mother 4
Neighbor's
 cow, poisoned "productively" (according to Davenport) 13
 lack of money 95
Neo-
 -"classical" economics/economists vii, 1, 3, 60, 72, 78, 82
 -Gandhian organizations in North America 141
 -institutionalists 122-27
 -orthodox economic thought 60-61, 72, 74-76, 80, 82, 114-16, 119, 121-24, 128, 136, 146, 149-50, 156, 164
Nerves, strained as a result of too much division of labor 45

- Net profits, taxation of 14
- Neue Freie Presse* 175
- Next generation, responsibility for 124
- New
- Deal 19, 78
 - Delhi xiii, 2, 30, 56, 134
 - Economics 131
 - Welfare Economics 80, 119
 - York City 6-10, 15, 91
 - financiers 42
 - York State (apart from New York City) 6, 15
- New Cambridge History of India, The* (37: TEM)
- New Republic, The* (120: SNR)
- Newspapers on Sundays 149
- Newton, Isaac 2, 152
- New York Times, The* 9, 174-75
- NGOs co-founded by Kumarappa 30, 53
- Nice soap and nicely packaged unhealthy foods 151
- Niches for people's differing skills, interests and imaginations 137
- Nile 174
- Nitrogen oxides 134
- "Noah's Ark" of non-native animals 129
- Nobel, Alfred 128
- Nobel
- Memorial Prize 13, 128, 136, 152
 - Prizes 60, 128
- Non-
- exploitive economic relations 141
 - fiction 165
 - profit enterprises in the USA 141
 - renewable resources x, 41, 87, 130, 136, 165
 - violence viii, x, 39, 42, 62, 100-01, 116, 131, 155
- "Non-Violent Economics" 131
- "Noose around India's neck" (according to Kumarappa) 55
- Nordic race 171
- Norfolk 150
- Normative
- economic thinking 59-67, 77, 117-42
 - et passim*
 - with nuanced evaluations 148
 - guide to action (Marxist) 114
- North America 123, 130, 141-42
- Nose-string(s) 45, 71, 123, 158
- Nostalgia 87
- Notebooks kept by Kumarappa in jail 28
- "Notice of a General Mathematical Theory of Political Economy" 72
- Notion that every person matters 130
- Nottinghamshire 68
- Noxious radiation 153
- Nuanced evaluations in normative economic thinking 148
- Nuclear fission 129
- bombs 52, 131
 - energy 132
 - reactors x
- Nursery rhyme ("Bobby Shaftoe") 7
- Nursing babies 45
- Nutrient(s)
- intake of 145
 - calories 45-46, 145
 - amino acids, calcium, iron, [other] minerals, protein, vitamins 145
- Nutritional
- effects due to rice-milling 178
 - levels 126, 138
 - scientists 145
- Nurturing the work force 140
- O'Brien, Denis Patrick (75: OLR)
- Obfuscation (by Bjorn Lomborg) 121
- Objective, long-term view of things 159
- Occupational hazards 178
- "Ocean" as metaphor for
- labor-wealth 119
 - world-soul 90
- Oceanic islands 129
- Odum, Eugene P. (83: OFE)
- Official biographies of Kumarappa 2
- Office of Price Administration 122
- Oil(s)
- cakes 180, 184
 - edible 46, 52, 180
 - lamps 38, 103
 - mills 23
 - from peanuts 184-85
 - for petrol 30, 41, 87, 131
 - from plants in general 38, 180
 - pressing 32, 38, 52
- Old
- age pensions 61
 - buildings in
 - flourishing urban neighborhoods 137
 - Indian villages, become poor 186-87
 - world quaintness and rustic order 177
- Oldfield, Josiah 21
- Oldham, J. H. 10
- Ominous indications of macro-ecological pollution 135
- One
- Asia Assembly 126
 - dimensional measuring 60, 135
 - world economy, multi-level 151
- McNeill, Jim (135: MWY)
- William H. (148: MSH)
- Means
- of production 33, 36
 - and ends 116-17
- Means, Gardner C. (78: BMC)
- Measuring the monetary costs of health-impairing pollution 156
- Mechanization 36, 144
- of rural crafts 162
- Media (of public communication) 122
- Medical
- care 118, 131
 - prize 128
 - science 93, 146
- Medieval
- and rural outlook 33
 - town planning 177
- "Mediocrity" (in an odd sense used by Jevons) 84
- Meditation 107, 133
- Mediterranean cities, ancient 148
- Mehta, Rajchandra 92
- Vadilal L. (89: MET)
- Vaikunth L. (89: MDD)
- Menger, Carl 17
- Menken, Jane (155: MWP)
- Mental
- "fight" (according to Blake) 84
 - reactions to deprivation 118
- "Mental Medicine" 167
- Mercantile marine 180
- Merchants 58, 95
- Meretricious wisdom (according to Galbraith) 123
- Mesopotamia 85-86
- Metabolism 85
- Metaphor of the Earth as an organism 153
- Metal, a non-renewable resource 131
- Metallic
- casters 53
 - monetary standards 180
- Metamorphosis of socio-economic "organisms" 138
- Meteorology 152
- Methab, Hari Krishna 50
- "Methodists Decry Wealth of Nation" 9
- Methodological points in common between Kumarappa and Gunnar Myrdal 127
- Microeconomic guide to agriculture 52
- Middle-class demand 52
- interests 61
- Middle-East Technical University xiii
- Middlemen's charges 36
- Migration 99
- of dirty industries to less developed countries 156-57
- Militant "economics of peace" 143
- Military
- expenditure, expenses 22, 181
 - personnel at home in the USA after deployment abroad 150
 - power viii
 - way of thinking 139
 - weakness 33
- Milk 45-46
- Mill, John Stuart (51: MU). 58
- Mill(s)
- "dark Satanic" 83
 - hands 101
 - owner(s) 44, 100-01, 118
 - production 119
- Miller, Martin A. (63: MK)
- Milling of rice, effect on nutrition 178
- Millionaire(s) 24, 39, 103, 184
- Millions of
- additional people each year in India 126
 - bales of cloth sent to Lancashire 108
 - chaste marriages 155
 - children 119
 - cultivators 50
 - hectares of land
 - deforested 154
 - formerly fertile but now agriculturally unproductive 154
 - Negroes perishing in the slave-trade 171
 - outcasts in India 11, 172
 - people
 - chronically hungry 99, 102
 - earning less than four annas per day 98
 - in London, polluting the river 86
 - more each year in India 126
 - potentially employable in India 119
 - reduced to poverty/malnutrition 105
 - starving 25, 65, 111, 120
 - surveyed by questionnaires 37
 - taking to economic exploitation 111
 - unemployed 108, 110, (173)
 - ready-made machines 119
 - slaves imported into British colonies 170
 - years 112, 164-65
- Millowners' Association of Bombay 118
- Milton, A Poem in Two Books* 84
- Mineral
- resources of India 172
 - wealth 84, 188
- Minerals 87
- used in industry 132

- Park Avenue 9
- "Parochial" determinism (attributed to Rostow) 163
- Parochialism 55
- Parry, Hubert 83
- Parsis 100
- Parthenon 2
- Partyless democracy 53
- Pascal, Blaise 159
- "Passage to India" (by Whitman) 20
- Pastors 95
- Pasture(s) 83, 135, 180
- "Paths to Economic Growth" 132
- Pathways Back to Prosperity* 29, 173
- Patna 181
- Patriarchy 140-41
- Patriotism, Gandhi's concept of 109
- Pattern(s) of consumption, investment, etc. 77
radical talk but conservative action 125
- Paucity (alleged) of conflict of interests ca. 1930 between Britain and India 172
- Pauly, Daniel (153: *PMO*)
- Pavlov, Vladimir Ivanovich (37: *PHP*)
- Payment
fair 96-97
in kind 20, 23, 31, 47, 186, 189
- Pay-scales in Japan (in 1951) 53
- Peace 41, 87
ushering in financial chaos 173
- Peaceful disposition an aspect of moral strength promoting (according to Gandhi) survival of the species 91
- People
seasoning concern for their own welfare and for that of their families and tribes and nations with concern for the future of our species and of life on Earth 165
who are more concerned with "things" than with ideas or (other) people 170
with below-average incomes getting relatively more and more (or else less and less) to spend 164
- Peoples
Atlantic 175
inferior (allegedly) 172
primitive 171
- Pearson, Scott R. (145: *WBF*)
- Peas and beans 46
- Peasants, Peasantry 101, 161-62
- Penchant for economic models based on monetary formulations 146
- Pensions, old-age, introduced in Germany in 1889 61
- Per-capita availability of cereals, pulses 46
ecological depletion 157 (ecological footprint 135)
income 22, 24, 38, 182-83
areas of arable land in India 45
production 64
- Per-diem calories and ounces of food 46
- Perelman, Michael (85: *PNA*)
- Perennial maldistribution and misuse (according to Kumara-rappa) of purchasing power 182
- Permanency 40-41, 165
- Permanent Commission (1930s) 48
Settlement (1793) 180
- Permanently dependent economic regions (according to Jacobs) 138
- Perpetual subjugation (desired by Stoddard) of most of mankind in order to preserve the nordic race 171
- Perrault, Andrea iii, xiii
- Persia 85
- Persistence of traditional habits 134
- Personal identity ix
services purchased, small-scale, with notable satisfaction 151
- Personality developed by work 134
- Pesticides 129, 144, 149
- Pests, agricultural 46, 57, 180
- Petrol, Petroleum 30, 41, 87, 131
- Petty, William 69
- Pfeiffer, Ehrenfried 179
- Philanthropic institutions, Islamic 163
work 81
- Philip, André 29, 176
- Philosophy of unlimited economic expansion 131
- Philosophy of Work and Other Essays, The* 47
- Physical human body 134
work 103, 159
- Physics 2, 60, 74, 82, 128, 152, 164
- Physics-envy 93, 116, 146, 152
- Physicians (good and bad paid alike, according to Ruskin) 94-95
- Piazza, Alan (120: *APF*)
- Picnics 87
- Pigou, A. C. 14, 17, 39, 75, 80-81, 88, 149, 164
- Pigouvian taxes/bounties 17, (19), 81, 87, 154, 164
- Pigs 93
- Pinchot, Gifford 86
- Pine forests 86
- Pinglaj 25
- Pisciculture 180
- Plagues, current 153
- Plan Balkan 54
- Planetary citizens 142
- Plan for Provincial Reconstruction (as Illustrated by Bihar)* 181
- Planned Economy for India* 181
- Planned Parenthood 112
- Planners not regarding low-capital-intensive activities as major instruments of industrialization 161
- Planning 44
all-embracing and flexible 182
rationalistic 126
Commission, Central (Indian) 48, 51
Economic (Swedish) 125
Committee, (Indian) National in the 1930s 36, 39, 181
in 2004 156
confined to building up enclaves 126
Indian, likely (according to Gunnar Myrdal) to improve if mindful of "Gandhi's fundamentals" 127
integrated 126
sarvodaya 51
town- 177
"vertical" vs "horizontal" (according to Kumara-rappa) 36
- Plantations 140
- Plastics 106
- Platinum 180
- Pleasures which one must part with in time because of the trouble they inflict 169
- Podolinsky Serhii (87: *PSU*)
- Poem(s) by Robert Frost 148-49
William Blake 83-84
- Point of sufficiency 131
- Poisoning, of air, water and land due to towns 85-86
of laborers with noxious dust 178
of one's body by "sour thoughts" 169
productive, of a neighbor's cow 13
- Policies, suicidal for humanity 153
- Policy Planning Council (USA State Department) 132
- Political boundaries
conducive (according to Kumara-rappa) to peace when conforming to watersheds 55-56
international, compartmentalizing the most and least remunerative aspects of converting raw materials into consumer goods 184
consciousness and "interference" in society 124
-constitution function 119
organization(s) (Marxist) 114
possibilities in regard to taxation 118
and cultural subversion of the environmental movement 128
- Politicians, Indian, subsidized by the Community Development Program 160
- Politics* (60: *AP*)
- Politics of the Solar Age: Alternatives to Economics, The* 142
- Pollution
of air 153
of the Earth's food-chains 129
health-impairing 156-57
macro-ecological 135, 164
of the natural environment 83, 87
of the Thames 86
of water (generally) 142, 153
- Poonia, J. S. (28: *PPF*)
- Pony express 122
- Poor
farmers 115
health 55
- Pope, Alexander 152
- Popular education 175
American journal for businessmen (*Fortune*) edited by Galbraith 122
non-fiction 165
- Population
-decline in the 19th century in Dacca 8
in Sweden 123
-density in flourishing urban neighborhoods 137
unhealthy British industrial towns 170
-explosion(s) 46, 59, 112, 126, 154-155, 165, 157, 162, 165, 180
-increase and labor efficiency 180
to be checked (according to Riccardo) among the working classes by not providing facilities where their children would be treated well 59
pressing upon available supplies 173
more able when dense than when sparse to have effective public opinions 12
of an ideal self-sufficient district 49
rate of increase in Britain 59, 154
in South Asia 112, 126, 154
worldwide 154-55

Population and Development Review
(120: APC, APF, CPC)

Population and Environment... (84: DWE)

Populism 88

Porous clay tubes in
water-efficient irrigation 144

Porcelain teeth (cited by Kumarappa
as objects of middle-class
demand in Japan) 52

Portney, Paul R. (76: PWD)

Portable spinning-wheels 107

Positive
aspect of small-is-beautiful
theory 150-51
consequences of using money 163
progressive elements of Marxian,
Gandhian and Liberal options 163

Possession, private, of property:
conducive, according to Gandhi,
to violence but countenanced by
him under certain conditions 101

Postal and telegraph service 49

Post-
-ideological temper 165
-modern paradigm 141

Potato(es) 46, 86

Potentially endless (allegedly) develop-
ment of the market economy (72), 137

Pottery 9, 23, 31, 38, 52, 56, 180

Poultry 4, 180

Pounds
of food annually per-capita 46
sterling 22, 64-67, 98

Poverty 80, 95-96, 118, 121,
125, 149, 156, 174
allegedly due to a law of Nature 175
in India 9, 11, 15, 19, 21-22, 31,
37, 40, 44, 64, 66, 68, 80, 89,
95, 97-100, 105, 109, 118, 121,
161-62, 172, 180, 182-88
in Sweden 123
in the USA 79, 138

Poverty and Famines 120, 164

Poverty and Un-British Rule in India 63

Poverty-stricken nations getting more into
big-is-beautiful globalization 156

Power
bargaining- 176, 186
-concentration 49
dangerous 175
drawn (allegedly directly) from
the Supreme Power 167-68
electric 115
-looms 118
military viii
moral 96
over other people's labor 95-96

Power (cont.)
of the
meek 171
rich 115
-production 187
purchasing- 120
by steam 115
-struggle(s) viii
transitory vs (allegedly) permanent 100
used to enrich the world 175

Powerful
moral influence of religion, lost,
with disastrous results 170
trade-unions 118

Practice and Precepts of Jesus 40

Prakash, Vijay Chandra 144

Prasad, Anirudh (144: PID)

Prayer (in the form of spinning cotton) 107

Preachers (or physicians), good and bad
paid alike (according to Ruskin) 94

Preaching disaffection (a crime in India
under British rule) 99

Precepts (explicit or implicit) of orthodox
or neo-orthodox economic thought
58-59, 61, 72, 74-76, 80, 82, 89,
93, 114-16, 119, 121-24, 128,
136, 146, 149-50, 156, 164

Precious-metal monetary standards
175, 180; *see also* Gold and Silver

Preconditions for human life 135

Predation, economic 14, 20, 39-41,
78-79, 140, 147

Predetermined outputs 44

Preferences and tastes 121-22, 169

Prediction 121

Prentice Mulford 5

Preoccupation with the sheer tumult of
20th-century technical, cultural
and political developments 165

Presbyterian Church 7

Prescription(s), suitable 146

Present-day (ca. 1960) economics 131

President's visit to Kumarappa 50-51

Prestige
carried by the words "Nobel Prize" 128
of orthodox economists 150
of the White Man, lost in World War 170

Prevalent business sentiment 172

Prevention of cruelty to cattle 180

Price
-controls 6
-equalization 49
-negotiations 176
in relation to
quantity of money 180
utility and value 179

Price, Colin (76: PTD)

Primary
factors in the economy 130
needs 47, 52
schooling 126, 165

Primacy of the group or community 40

Primary schooling 24, 34

Primitive peoples 171

Principles (moral, religious etc.) 44, 171

*Principles of
Economics* 73
Grammar... 13

Priorities in planning 48, 161-62, 165

Prison
reforms (suggested) 47
sentences for hoarding 173

Private
altruistic organizations 189
gain 13
property ix, 19, 100-01
justified by the owner's labor 69
wants vs public needs 122

Prize-winning scheme for junk bonds 128

Probability, gauged by rational would-be
criminals, of capture, punishment 74

Problems
of agriculture, industry and currency
(allegedly incapable of separate
solution in India ca. 1940) 182
of beggary in modern India 180
human vs engineering 118
macro-ecological 164-65
due to overpopulation 180;
see also Population
potentially fatal to humanity 164
settled (by Samuelson) for all time 152
with arguments against exporting
pollution to poorer countries 157

Prodigious spoilers (English, ca. 1660) 83

Producing
the best that one is capable of 134
goods of good quality 151

Production
costs of 5, 51
decentralized x, 33, 151
factors of 28, 179
forces of vii, 33
mass- viii, 33-34, 115, 148
means of 36
modern (ca. 1935), by machinery 179
substitutable forms of 122

Productive
capacity wasted 173
jobs at low capital cost 51

Productivity defined 13, 163

Products
and skills of full-blown
urban civilization 149
artificial 180

Professorships
in England 73, 80, 136, 123,
in Finland xiii, 73,
in Germany 14, 17, 61-52, 133
in Hungary and Turkey xiii, 1
in India xiii, 1, 33-34, 75, 98
in the USA 6-7, 11-22, 78, 122

Profit 95
-motive in exploitive agriculture 153
of society as a whole 101
and rent 180

Profiteering 173

Pro-forma approval of an economic plan 49

Programmatic declarations disregarded 139

Programs for
low-capital-intensive activities 161

Progress
in regard to a Christian ideal of
trusteeship in the colonies 169-70
of genuine sciences 164
of industry in India 176
in orderly development of large-
scale industrial organization 173

Progressive
elements of the Marxian, Gandhian
and Liberal options 163
taxation 6, 14, 48

Prohibitive customs duties 181

Proletarians, proletariat ix, 70-71,
115, 131

Prominent corporations failing 141

Promises made during wartime stress 171

Promotion of
human comfort 170
public interest 138, 157

Propaganda
against voluntary simplicity 115
angry (by Kumarappa) 36

Propensity to consume (regarded by
Amartya Sen as a social factor
affecting choice of techniques
in the weaving industry) 118

Property, private ix, 19, 100-01

Proposals for liberalization 157

Prosperity 96-97
modern-type 156

Protection
of cattle 180
from fire 142
from foreign competition 180
of honest trade and industry 176
of infant industries 183
of vested interests by subverting
the environmental movement 128

Protective, prohibitive and
productive customs duties 181

Protein 46

- Protest marches 51, 53-54
- Proverbs, Book of* 96
- Providence, allegedly divine 159
- Provincial (in India)
conflict with other provinces 55
elections 53
languages 55
reconstruction 181
- Proving the wrong
"by showing a better way" 5, 167
- Provision by women of household
services to male labor force 140
- Provocative questions in Davenport's
textbook on elementary economics 12
- Proudhon, Pierre-Joseph 33
- Pseudo-science 60
- Psychological Approach to Theology, A*
181
- Psychology 7, 39, 58, 60,
76, 80, 82, 92-95, 116,
155, 157-59, 163, 180
- Psychopaths 74
- Public
borrowing and credit 172
buildings in Indian villages 186
confidence in the economy 173
debt(s) 22, 47, 172
finance 180
study of 6-7, 14, 16, 19-22, 23
health 160
interest 58, 138, 157
needs vs private wants 122
opinion in England 130, 178
-utility concerns 49, 187-88
will in democracies 120
- Public Debts. An Essay on the
Science of Finance* 29, 172
- Public
Finance 6
Finance and our Poverty 19-22
Services in India 181
- Puddi 186
- Pulses (i.e. beans and peas) 46
- Punjab 38, 181-82
- Purchasing-power of the masses 185
- "Pure" economics 77, 118, 123
- "Purification" of human character 133
- Puritanism 127
- Purpose(s)
in life, lack of, causing
intellectual inferiority 169
ordained (allegedly) by Nature 146
worthwhile 124
- Pyarelal (23: *PLP*), (101), (110)
- Qaddafi, Muammar al- 163
- Quality of
development 139
consumer goods 5, 125, 151
mass education in India 160
life 117, 127
- Quantitative
accounting of
material interactions
between human society and
non-human parts of Nature 128
social costs 142
expansion vs qualitative development 139
- Quantum mechanics 2
- Quarrels in the family over property 100
- Quarterly Journal of Economics* (3: *VES*)
- Queen Victoria 66
- Questionnaires used by Kumarappa 37, 47
- Questions about economics "which
everyone except economists ask" 136
- Race(s)
"backward" 116
inherently inferior (allegedly) 170
problems in regard to 124
ruling 172
- Rahkit, Hemendra K. 8
- Railway(s) 21-22, 27-30, 49
56, 65, 67, 104, 175, 180
fares, rates, tariffs 183, 187-88
- Raj, Kakkadan Nandanath (118: *RSM*)
- Rajasthan 65
- Rajchandra Mehta 92
- Rao
Amiya & B. G. (160: *RST*)
Gopuraju Ramachandra 53
U. R. (154: *RTS*)
V. K. R. V. 182
- Rapid
socio-economic change nowadays 135
decrease in the agricultural labor force
in Sweden and the USA 126
depletion of the power of Earth to
sustain a current way of life 131
exhaustion of water supply 154
increase in the Indian population 126
replacement of locally adapted varieties
of crop with one or two high-
yielding strains 153
- Rash and reckless spoilage 81
- Rates of
depletion and pollution 159
discount of currency 180
interest 24, 82
population increase 126
- Rational-expectations models 1, 74, (158)
- Rationalistic planning 126
- Rationalization, industrial 178
- Rats 93, 155
- Ravallion, Martin (161: *DRP*)
- Raw materials viii-ix, 34, 41, 48,
56, 109, 134
for healthy individual metabolism and
body development 145
heavily taxed 183-84
international competition for 164
- Ray, Baren (160: *RIS*)
- Reaction (ideological) 13, 33
- Reactionary attitude toward factories 150
- Real-estate speculation 13
- Rebellion of 1857 27
- Receding water tables 154
- Recessions 60
- Reckless neo-orthodox doctrine 164
- Reckoning in terms of
areas of ecologically productive
land and water 135
energy 135
materials, human energy and
human time 51-52
money 39, 50, 157
various different kinds of unit
(in medical assessments) 146
- Reconciliation
between global and local economy 160
Gandhian 117
to one's own subjugation 118
- Reconstruction
provincial 181
of Indian villages 104, 108
- Recovery: The Second Effort* 29, 174
- Recreation 25
- Recycling 142
- Red Economics* 29, 175
- Redistribution 14
- Reducing economic concepts
to one dimension 60, 135
- Rees, William (135: *WRF, WRM*)
- Refinement of psychological insights 157
- Reform,
land- 48, 50, 52-54, 102, 126, 160, 174
egalitarian 127
thwarted by population explosion 155
- Reformation of forests 83
- Refrigerators, thermos-type 144
- Refugee-camps 103
- Regional supplies of food 119, (148)
- Regions which mainly supply
raw materials to cities 137
- Regulation viii
of foreign trade 186
- Reichstag 61
- Re-investment of surplus gains 118
- Relations
of economic production vii, 140
of human reproduction 140
between organism, function
and environment 177
- Relative
depletion (i.e. per-capita) of
ecologically supplied resources 157
numerical weakness of seafaring mer-
chants vis à vis land-dwellers 148
permanence 40
- "Relevance of Gandhi to Our Times, The" 134
- Relief-work 29-30, 47, 120, 180
- Religion 97, 127, 159, 177
- Religion in Transition* 37
- Religious
communalism 92
differences between Gandhi and
Kumarappa 163
- Rendering the Earth uninhabitable 129
- Renewal of sources due to transforma-
tion of flows from sinks 134
- Rennie, John (37: *RMM*)
- Rent of land 179-80
- Reparations (after World War I) 7, 174
- Repairing pollution damage 142
- Repeatable controlled experiments,
normally unfeasible in
social studies 16
- Repetition work 73
- Replenishing the sources that
support and sustain us 142
- Report of the
Central Provinces Government
Industrial Survey Committee* 183
*Forest Administration in
the Mysore State...* 181
- Republic (imaginary, described by Ruskin)
populated by three men only 96
- Reproducing the work force
(by procreation) 140
- Research
due to rich people 175
into the effects of pollution upon
children's health 150
into improvement of tools, implements
and processes in rural industries and
agriculture 38, 144, 178-80, 188
due to the Industrial Revolution 170
into South Asian problems 127
- Resisting
famines 99
tradition and authority 171

- Resources viii-ix, 157
 of the government in India,
 burdened by the army budget 171
 local ix
 natural,
 non-renewable x, 19, 41,
 83, 87, 130-31, 136, 165
 renewable x, 38, 41, 131, 134,
 153, 179
- Responsible use of fertilizers 163
- Responsibility of governing 160
- Responsiveness to everyday needs 126
- Restraining evils of competition 39, 182
- Restriction of relatively unnecessary
 consumption 76, 127, 141
- Resurgence* 134
- Retreading tires 52
- Return home of military personnel
 from fighting abroad 150
- Revolution
 Green 96
 Industrial vii, 8, 22, 170
 proletarian 115
 Russian 71
 in thought, due to women 178
- Rhetoric
 charmingly or counterproductively
 pungent 7, 27, 127, 165
 feminist 34-35, 140, 177-78
 generally outmoded 60, 177-78
 smooth 40, 117
- Rhodes scholarship(s) 130
- Ribs of impoverished men 28, 121
- Ricardo, David vii, 17, 59, 88
- Rice
 -husking 52
 wholesome vs refined 31
- Rice Problem in India, The* 178
- Riches from
 a given natural ecology 139
- Rich people 14, 101-02
 allegedly not desiring to
 keep others poor 175
 clashing with the poor 175
 their living-patterns 127
 finding satisfaction in
 made-to-order goods 151
- Richest stratum of the peasantry 162
- Rickshaws 187
- Ridicule
 making (or not making) someone
 give up a plan or purpose 168
 of small-is-beautiful theory 148-49
 of trusteeship theory 101
- Ridley, Matt (157: *ROV*)
- Rigging the stock market 14
- Rights, human 165
 of the individual 40
 intrinsic 157
 vis à vis duties 42, 92
- Rigorous discipline 125
- Rising tide of youth 171
- Risk(s) 94, 157-59
 assessed by insurance companies 159
 of wholesale bank failures 173
- River(s)
 total area of 135
 control of 55
 of blood in the USSR 44
 Ganges 174
 Nile 174
 providing consumable water 41, 87
 -valleys 55-56
- Riveting-machines 178
- Roads, road-building 20, 29, 56,
 121, 161, 170, 184
- Robbers 94
- Robbins, Lionel 75, 78, 123, 146
- Robertson, James (151: *RFW*)
- Robin Hood 68
- Robinson, Joan (73: *RHQ*), 136,
 140, 149, 152
- Rockefeller
 Fellowship 123
 residence in Manhattan 9
- Rodney, Walter (164: *RUA*)
- Roe, Frederick William (59: *RVP*)
- Rolland, Romain 33, 62, 100,
 105-06, 110
- Rolls-Royce cars 39
- Roman Catholicism 133
- Romantic appeal of inventions for
 theoretically appropriate but really
 inappropriate village technology 138
- Romanticizing subsistence farming 138
- Roosevelt
 Franklin Delano 18-19, 77-78, 173
 Theodore 86
- Rootless proletariat ix, 131
- Roots of evil ix; *see also*
 Unhealthy competition
- Rosenberg, John D. (92: *RGR*)
- Rosenzweig, Cynthia (153: *RHC*)
- Rostow, Walt 132, 163
- Rotary Club 1
- Rothermund, Dietmar (7, 21, 37,
 160-61: *REH*, *RLT*, *RMG*)
- Rothschild, Emma (58: *RES*)
- Roughage in one's diet 45
- Rough
 comparisons 114
 -hewn psychological insights 157
- Rousseau, Jean-Jacques 170
- Rowell, Andrew (128: *RGB*)
- Rowlett Act 171
- Roy, Tirthankar (37: *REI*)
- Royal Society 83
- Rubber plantations 140
- Rudolf, Lloyd I. (161: *RPL*)
- Ruling
 principle, allegedly cosmic (*Isa*) 112
 race 172
- Rupee 101
 -Sterling link 180
- Rural
 conditions 104, 182
 distress 176
 dominant groups 160-61
 economy 144, 162, 181
 indebtedness 24-25, 96, 180
 infrastructure 51
 and medieval outlook (attributed
 by JP to Kumarappa) 33
 poor remaining, under Nehru,
 as vulnerable as ever 161
 reconstruction (post-war) 52, 108, 162
 scene changing in India 162
 surveys (economic), comprehensive
 23-25, 31, 37-38, 56-57,
 127, 129, 144-45, 164
 units largely self-supporting 182
 uses of things made in cities 107
- Ruskin, John vii, 16, 20, 33, 51, 59-60,
 62, 88, 92-97, 101, 116, 158
- Russell, Bertrand 29
- Russia vii, (ix), 7, 34, 39, 47,
 59, 71, 100-01, 105, 170
- Rustic: *see* Rural
- Rutherford, M. C. (78: *RIE*)
- Ruthlessly exploitive globalization 149
- Sacher, Eduard (87: *SMG*)
- Sadhana 10
- Sadler, J. H. 69
- Sadavrata 104
- Safe methods of production of
 consumable energy x
- Safety razors 149
- St. John's Engineering Works 4-5
- Salary, high/higher 23, 118
- Sale, Kirkpatrick (68: *SRL*)
- Sale of labor 179
- Sales taxes 6, 173
- Saline soil 153
- Salt
 March 90, 99
 a pinch of it in one's napkin
 (cited by Gandhi) 98
 industry in India 180
 tax 22, 25, 75, 98-99
- Salt Manufacture in Ancient Orissa* 181
- Salter,
 Arthur 29, 174
 William M. (15, 117: *SER*)
- Salvation (alleged)
 of the British people 177
 of India 104
- Samuelson, Paul 3, 13, 119, 136,
 145, 152, 156
- Sanders, Daniel (71: *SWD*)
- Sanger, Margaret 112
- Sanitary wares 52
- Sanitation 67, 103, 110, 126, 142, 180
- Sanskrit 97, 111
- Sapre, B. G. (28: *SEI*)
- Sarcasm (avoided by Amartya Sen) 117
- Sarkar,
 Jadunath (28: *SEB*)
 Sumit (54, 104: *SMI*)
- Sarvodaya* 92
- "Satanic" mills (according to Blake) 83
- Satisfaction in
 one's life 165
 providing and consuming
 made-to-order goods 151
- Satisfying distant markets 151
- Savage
 age (the 20th century) 165
 stage of cultural evolution 115
- Saving the patient's life
 by a suitable prescription 146
- Savings banks 180
- Saxon weavers 69
- Saxony 85
- Say, Jean-Baptiste, *and* Say's Law
 vii, 3, 59, 68, 74, 82, 88, 146
- Scale of values 134
- Scarcity of capital in India 185
- Scenery 81, 87
- Scented hair-oil 184
- Schäffle, Albert 61
- Scharpebeel, H. W. *et al.* (153: *SSS*)
- Scheme, awarded the Nobel Memorial
 Prize, for dealing in junk bonds 128
- Schneider, Stephen (37: *RMM*)

- Scholastic
 problems of terminology 114
 theorem of neo-orthodox economics 119
- Schools 24, 34, 142, 187
- Schumacher, E. C. ix-x, 88, 130-34,
 142-43, 160, 163
- Schumacher College 134
- Schumpeter, Joseph A. (14, 17, 72: *SHA*)
- Science 73, 82, 116; *see also*
 Physics, Chemistry, and Biology
 of economics 131
 -fiction 175
 of gymnastics 93
 of human justice 96
 and industries 180
 medical 93
- "Science" (the word) 128
- Science of Life, The* 175
- Scientific American* (37: *RMM*),
 (153: *EME*), (165: *WFL*)
- Scientific (really or allegedly)
 advance, exponential 165
 conduct of exploitive agriculture 153
 ecological studies 83
 economics 95, 124, 152
 information
 deliberately ignored 128
 mastered 130
 knowledge 91, 129, 164
 procedures 157
 research and inventions 175
 socialism 17
- Scientists decrying deadly pollution 153
- Schizophrenic prize-winner 128
- Scotland, Scots 170-71, 177
- Sea
 total area used by a given population 135
 -vegetables 144
- Sea Around Us, The* 129
- Search for
 truth 11
 wealth 170
- Seasonal unemployment 108
- Seasoned wood 188
- Second Five-Year Plan (in India) 51, 152;
 see also First three...
- Secret British code-name for a plan
 to balkanize South Asia 54
- Secret History of the
 English Occupation of Egypt* 29
- Secrets of the atom 129
- Sectional and class selfishness 74
- Sectors (global, local), economic 151-52
- Seed
 -and-waste portion of crop(s) 45
 -selection 180
- Seigniorage 180
- Sekler, D. (78: *STV*)
- Selected Works of Mahatma Gandhi* 117
- Self 99
- Self-
 -confidence 54
 -destruction 44-45, 158
 -development 151
 -discipline 104, 115, 118
 -employment 125
 -governing villages 101
 -help 108-10
 -interest 74, 169-70
 -respect 54
 -reliance 108-10, 151
 industrial, in India 161
 -sufficiency 80
 local 49
 national 51
 in villages 125, 147
 -supporting
 life on farms 174
 rural units 182
- Selfish behavior 58, (159)
- Seligman,
 Ben Baruch (12, 15, 78: *SMC*)
 E. R. A. 11, 14-19, 24, 28-29,
 77, 88-89, 91, 172
- Selim, H. Magdi (153: *SSH*)
- Selvicultura Oeconomica* 83
- Sen, Amartya xiii, 18, 80,
 117-22, 128, 141, 161, 164
 his father 118
- Senility (103), 142
- Senior science advisor to the EPA
 (William Marcus) 150
- Sensible
 balance between appeals
 to love and to fear 158
 economists 151; *see also* Wisdom
 expectations 118
- Sentiment among businessmen 172
- Sentimentalism 16
- Separation (theoretical) between the natural
 inorganic conditions of active human
 existence and that existence itself 70
- Serafy, Salah El (122: *PTL*)
- Serfdom 63
- Sengupta, Arjun (100: *SFD*)
- Serious loss of efficiency 49
- "Sermon of Obedience" 91
- Servants
 and masters 93-94
 domestic, overworked 118
 of Gaia 142
- Serviceable institutions 79
- Service-oriented economic activity
 147, 188
- Servitude due to debts between peoples
 of altogether different degrees of
 industrial development, habits, views
 of life and forms of government 172
- Sethi, Jai Dev (89: *TTA*)
- Setting limits to economic activities 141
- Settlements which are good at
 import-replacing 137, 139
- Settling down before wrecking the
 planet 165
- Sevagram (30), 103, 155
- Seven kinds of organic fertilizers 144
- Sewage 56, 180
- Sewing machines 53
- Sex without love (likened by Schumacher
 to economics without spiritual, human
 and ecological values) 133
- Sexual servants pacifying laborers 140
- Shadda, Siddharaj 50
- Shah,
 K. T. 181-82
 Vimal & C. H. (23: *SSR*)
- Shakespeare, William 91
- Shaking babies harshly 150
- Shamed Nobel committee 128
- Shareholders 42
- Sharing 58
- Sharma,
 Hari P. (50: *GSI*)
 Shashi P. (89: *SGH*)
- Sharp
 decline in Swedish birth rate 124
 practices in commerce 26
- Sheep-flock-like communities 36
- Shet, Sunanda (53: *SGL*)
- Shifting to different imports 137
- Ships, manufacture of 83
- Shirking 103
- Shoddy goods 5
- Shoes 51
- Shooting upright judge(s) 13
- Shores and lakes 83, 129
- Short Account of the Gospels, A* 62
- Shortage
 of food 112
 of grain 120
 of rainfall 55, 120
- Short-distance transportation 131
 by bullock-cart 50, 106
- Shorter working hours 173
- Shortfall of consumer demand 82
- Short-time view of human life 159
- Shrinkage, soon after World War I,
 of British exports 178
- Side-effects, unforeseen 158
- Siegfried, André 178
- Silent Spring* 88, 129-30
- Silk 32
 factories/industry 12, 180
 trousers, Kumarappa's 23
- Silted-up irrigation tanks 57
- Silver 21, 64
- Simmons, Ernest J. (62: *SLT*)
- Simple
 joys x
 living 104, 115, 127, 173
 mathematics, Kumarappa's 164
 technologies 118
- Simrick, Jerry L. (78: *TVG*)
- Singh,
 Charan (89: *SEN*)
 Datar 182
- Sinks, sink-capacity 134-36
- Sismondi, J. C. L. 59-60, 88
- Sixty Years of Indian Finance* 181
- Size(s) of farms 179
- Skeletons/bleaching bones 68-69, 99
- Skeptical Inquirer* (60: *BIS*)
- Skills
 hereditary 92
 and products of full-blown
 urban civilization 148
- Skopol, Theda (19, 117: *SPO*)
- Skyscrapers 149
- Slander (against Carson) 130
- Slavery, slave-trade 63, 171
- Slum-clearance programs 136
- Slums 55, 124
- Slumps (economic) 60;
 see also Depressions
- Small
 blocks in flourishing urban
 neighborhoods 137
 -is-beautiful economics 1, 130,
 132-33, 139, 143, 160, 165
 bureaucracies 139
 cities and towns 174
 models (in economic theory) 1
 -scale
 experimentation 46
 industries 48-49, 115, 162
 welfare-states 150

*Small is Beautiful: Economics as if
People Mattered* 130, 132-33, 143

Smith

Adam vii, 16-17, 39, 43,
58, 74, 88, 157
Vernon L. (128: *SCE*)

Smugness, moral 52, 143

Snakes 155

Snow, John 85

Soap 52, 151

Social

affections 60, 93-94, 116, 158
animal (human) 116
benefits of greed 116
choices 119
classes 179
conditions 16, 121, 158
consequences of money 163
considerations, concerns 14, 157
corrective to short-time view of life 159
costs (viii)-ix, 5, 10, 20-22, 27, 34,
65, 67, 81, 85, 87-88, 92, 126,
136-37, 142, 149-50, 156-57,
159, (162), 169-71; *see also*
Unemployment

customs, tenacity of 187
-Democratic Party (in Sweden) 124-25
effects of public debts 172
functions, rural (weddings, funerals) 25
justice 160
nature of humans 108
net profit 80
order built up from the base 151
organization 39, 74, 159
ownership 33
policies 61
prejudices 125
reconstruction 151-52
reform 124-25
responsibilities 14, 92
science 16, 60-61 (*see also* Sociology)
-security program 61
solidarity 124
status in India: *see* Caste
somewhat altered under Nehru 161
structure 176
studies 7-8, 27, 77, 177, (124-25)
theorists, advanced 157
theory of taxation 14
use of private property 100
values 80
welfare 160
-welfare function 119

Social Costs of Private Enterprise 142

Socialistic

order 100
schemes 74
type of economic activity 147

Socialism/Socialists vii, 9, 33, 40,
49, 61, 72, 78, 114, 179

armchair 61; *see also* Kathedersozialisten
Fabian 175

Social Research (163: *KGI*)

Societies, affluent 115

Society based on mutual
good will and understanding 189

Society for Economic Equality: *see*
Arthik Samata Mandal

Sociology 7-8, 27, 77, 177, (124-25)

Socrates 100

Socratic approach (by Davenport)
to teaching 12

Söderqvist, Thomas (83: *SEM*)

Soddy, Frederick 60

"Soft" state (i.e. government) 127

Soil

-analysis 57, 130, 160;
see also Initiation...
Association 132
becoming alkaline or saline 153
-conservation projects 161
-degradation 56, 81
-depletion, erosion 139, 179
-fertility 21, 31, 38, 81, 85, 163
a "living organism" 179
a prime source of wealth 70, 84
-tilling as a way of life 92
worked seasonally 104-05

Soil Fertility, Renewal and Preservation
Bio-dynamic Farming.... 179

Solar

Age (i.e. epoch), "dawning" now
(according to Hazel Henderson) 142
energy x

Soldiers 94-95

at home after deployment abroad 150

Solow, Robert (60, 152: *PEH*), (122: *SDE*)

Some Aspects of Rural
Economy in the Punjab... 181

Sophistication, mathematical 145, 157

Sophistry in juggling economic statistics 90

Sorbonne 17

Soros, Marvin S. (153: *SEA*)

Soul(s) 93-94, 96, 116, 158

Sources

of benefit 42
renewable/nonrenewable 40

South

Africa 23, 62, 92, 97-98, 111, 117
America 42
Asia 125, 127
her leaders 125
Dakota 13
-eastern parts of the USA 137-38

Soviet Union ix, 33, 44, 49, 52

Soya Bean: Its Value in Dietetics,
Cultivation and Uses 181

Sozialpolitik 17

Spaceships 2

Sparing use of centralized industries
(proposed by Kumarappa) 188

Sparks, Donald L. (153: *SES, SSH*)

Spear, Percival (54: *SMB*)

Specialization "beyond the point
of human integrity" (accord-
ing to Schumacher) 131

"Spells, or the Law of Change" 169

Spending "natural capital" 135

Spice 27, 98

Spinners' Association 38

Spinning 9, 23, 106-08, 118

-out of sophisticated
mathematical models 157

Spiritual

benefit to producers and consumers 151
knowledge equated with faith 167
strength, power 167-68
values 133

Spoilation 81

Spontaneous urges to action 158

Sports

-car, driven by a flapper 175
goods 52

Spread of

democracy and human rights 165
distrust of the British 171

Squalid kakotopias 177

Stable

civilization 171
currency-exchange rates 180
government 6
society ix

Stages of economic development 28, 73

Stakes at risk 158-59

Stale arguments

attributed implicitly to Gandhi 148

Standard definitions

for technical terms 146

Standard(s) of living 44, 48, 79,
105, 125-26, 182-83
and the label, "poverty" 180

Stark dilemma with lethal substances 129

Starry heavens above, awesomely inspiring
(according to Kant) like moral law
within human hearts 90

Starvation 69, 75, 93, 110-11, 119, 174
spiritual 99, 119

State, the vii, 35, 46, 159

as guardian of the common welfare 178
"soft" 127

State

functions 81, 178, 180
issue of paper money 180

State (*cont.*)

management of
certain industries 49
forests and mineral wealth 188
monopoly of foreign trade 46
oppression 160
ownership
of production 105
of property 101
the Soviet Russian model 179
regulation of foreign trade 188
subsidies and grants 180
unemployment insurance 173

Statistical GNP 149

Statute of Limitation/Liberation 131

Stealing 11, 13, 74, 168

Steam power 68

Steel

industry in India 176
mills (in general) 106, 188

Stein, Burton (35, 63, 65, 67,
105, 108, 112, 156, 160-61: *SHI*)

Steiner, Rudolf 179

Steinman, David (150: *SDP*)

Sterling-rupee link 180

Stockholm University 128

Stocks of grain 120

Stoddard, Lothrop 171

Stoffwechsel 85

Storage

facilities 161
of water 55

Strachey, John 29, 66, 176-77

Strain on human

muscles 73
nerves 45

Strength, spiritual/mental, dis-
cussed in a book read by
young Kumarappa 167

Strife, industrial 93

Study in the USA of economics 145

Sturges, Paul (75: *BSW*)

Styles of thought 116

Subdued housewives 118

Subjugation viii, 118, 171

Subsidies 48, 126, 138, 180

Subsistence wages 59, 115, 118

Substances, lethal 129

Substantive individual freedom 121

Substitutable values 135

Substitutability 122

Subverting environmentalism

in order to protect vested interests 128

- Successful economic development 139
 modern men 168
 capitalism 149
- Sucking life-blood out of the people 98
- "Sufficient" economic progress (preferable, according to Schumacher, to "excessive" economic activity) 131
- Sugar 7, 31-32, 38, 56, 180
- Suicidal ecological policies (according to scientists of repute) 153
- Sulfur dioxide 86
- Sum effect of many carcinogens 150
- Summerhayes, C. P. (153: *FHS*)
- Summers, Lawrence 156-57
- Sunday newspapers (mentioned wryly in a poem by Robert Frost about Gandhian economics) 149
- Sunlight (meriting, according to Kumara, "attention and regard") 158
- Superannuation 178
- Supplies of food, regional 120
- Supply and demand 179
 -side economics 73
 and value of precious metals 180
- Surplus capital 24
- Survey of Matar Taluka, A* 183
- Surveys, economic 23, 37-38, 164, 183
- Survival of the human species 91, 135
- Surviving bankruptcy 135
- Surroundings, hideous (according to Galbraith) 103
- Sushila Nayar 126
- Sustainability 83, 121, 135, 165
- Sustained expansion of the market economy 164
 intellectual effort in order to create napalm 147
- Swadeshi 33, 38, 108-09
- Swaminathan, M. S. (154: *SFP*)
- Swaraj 99, 104, 110
- Sweden 83, 123-25, 128
- Swedish ambassador to India 125
 birth rate 124
 committee 128
- Sweepers 186
- Switzerland 110, 179
- Sylva, or A Discourse of Forest-Trees, and the Propagation of Timber...* 83
- Symbiosis between local landlords and civilized merchants and traders 148
- Sympathy with the essential and characteristic life of a place 177
- Symphonies by Beethoven (more worthy of the label "classical" than is orthodox economic thought) 2
- Synthetic baby-food(s) 45, 140
- Syracuse University 6
- System(s)
 addiction-driven 140-42
 caste-: see *Caste*
 of distribution by a combination of money- and barter-exchange 186
 joint-family 9, 40, 80, 180
 theoretical, in economic thought:
 closed 59, 70, 73-74, 76, 114, 128, 154, 156
 open 59, 70, 82-88, 114, 128-36, 152, 155, 158, 164
 of governmental and economic administration 130
 of licensing 127
- Systematically creating dependency instead of fostering self-reliance and capacity for self-development 151
 surveying the rural economy 164
- Szegi, J. (153: *SSC*)
- Tagore, Radindranath 10-11, 26, 118, 171
- Tagore Memorial Lecture viii
- Tailor(s) 23
- "Tailor-made" goods 150-51
- "Take-off" (according to Rostow) into sustained economic growth 132
- Taking macro-ecological problems seriously 164-65
- Tamilnad 38
- Tammany Hall 15
- Tampering with nature's balance 129
- Tanjore 4
- Tanks
 aquatic 55
 armored 138
- Tanning 180, 189
- Tapping of underground water 154
- Tariff Board 48
- Tariffs: see Customs (duties)
- Taxation (see also British taxation)
 according to ability to pay 14, (21), (125)
 anomalous vs judicious 181
 direct vs indirect 180-81
 discouraging the growth of industries in India 183
- Taxation (cont.)
 justification, principles, costs 180
 in kind 24, 35-36, 111, 189
 on land occupied 24-25
 modern political possibilities 118
 progressive/regressive (6), 14, 21, 48
 on sales 6, 173
- Tax-exempt securities 6
- Tax revenues propping up big corporations that are beginning to fail 141
- Tastes and preferences 121-22
 of (allegedly) inferior minds 169
 "fine" 168
- Tea plantations 140
 rooms for factory hands 44, 123
- Technical terms with standard definitions 146
- Technicians advising farmers about soil 130
- Techniques
 choice of 118
 promoted by the AIVIA 159
- Technological advances, vast 165
 education 182
- Technologies
 arbitrarily arriving in the countryside from distant cities 138
 simple, complex 118
 intermediate 132
 prevailing 135
 with a human face 132
- Teeming millions 119, 185
- Teen Murti House 2, 50
- Telegrams 34, 104, 174
- Telephones 149
- Telugu 55
- Temperate-zone agriculture 179
- Temperature, age, weight, pulse, cell-counts, etc., requiring, in medical science, different kinds of units of measure 146
- Temperatures, abnormally uncomfortable, in work-places 178
- Temples ca.1940 in Indian villages 187
- Tenacity of social customs 187
- Tenants of land
 cultivating vs "intermediate" (i.e. not themselves cultivating) 50
 in the United Provinces (India) 181
- Tennyson, Alfred 12
- Tenure, academic 15
- Terminological problems 114
- Terrorism 157
- Textbooks, Soviet Russian 72
- Thames 85-86
- Theology, Theologians 40, 114, 181
- Theoretical calculations of per-capita income 182
 scale of five types of economic activity distinguished by ethical attitudes 147
- Theory of the Leisure Class* 13
Monopolistic Competition, The 152
Political Economy, The 72
- Thermous-type ceramic refrigerators 144
- Thieves and bandits 110
 absence of, ca.1830 in India 156
- Third World (ca.1970) 132
- Thomas, Norman 9
 P. J. 182
- Thompson, Edward P. (68: *TMW*)
- Thoreau, Henry David 5
- Throwaway containers 142
- Threatening life 133
- Thunderous ovation given by businessmen in the USA to a Marxist economist, a woman, subsequently rejected by the Nobel Memorial Prize committee 136
- Thurrow, Lester (76: *TFC*)
- Tilak, Bal Gangaghar 109
- Tiles 56
- Tillyard, E. M. W. (91: *TSP*)
- Tilman, Rick (78: *TLV, TVC, TVG, TVI*)
- Timber 41, (83), 87, 188
- Time* 120
- Time-worn convention and custom 171
- Timmer, C. Peter (145: *WBF*)
- Tingsten, Herbert (125: *TSS*)
- Tinkering (dangerously) with complex systems 158
- Tithing 35, 115
- Tobacco 56
- Tolstoy, Lev 33, 61-63, 88, 92, 95
- Tolstoy Farm 62
- Tomlinson, B. R. (37: *TEM*)
- Tongas, horse-drawn 187
- Top-down economic management 115
- Torture 25
- Total area, used by a given population, of ecologically productive land and water 135
- Totalitarian ideologies 165

- Town
dwellers (referred to by Gandhi) 99, 107
life (referred to by Schumacher) 132
planners, planning 177-78
- Toxic
residues in food 154
waste 156
- Touring lectureships
(as a means of rural uplift) 180
- Toynbee, Arnold vii
- Toys 51-52
- Trade
free 78, 178, 180
international 135-36
in slaves 171
in weapons 149
-unions 101, 118, 170, 179
-volume 180
- Trading
stations, fortified 104
system 120
- Traditional
Western academic thought
about economics vii, 134
simple living 127
- Tragedy 164
- Transcending dualisms 147
- Transferring
moral values mutually by means of
honest economic exchanges 185-86
to foreign countries,
opportunities of employment 182
to wage-earners, a larger share
of the products of industry 173
- Transformation of
flows from sinks, into sources 134
raw materials, into manufactured
articles 183-86
- Transience 41, 43, 87, (131)
- Transitional periods 19, 48, 173
- Transplanted factories 138
- Transplants of city work into
non-urban locations 137
- Transport
central organization of 187-88
inadequate facilities of 120
system 48
- Trauma due to riveting-machines 178
- Treason 11, 68, 172
- Treating polluted water 142
- Treaty of Utrecht 171
- "Tree-wool" 107
- Trevelyan, Charles 66
- Tribes vii
- Tricks of logic 95, (119)
- Troilus and Cressida* (91)
- Troposphere 134
- Trouble inflicted by unwisely chosen
pleasures (according to a book
read by young Kumarappa) 169
- Trousers, silk (in which Kumarappa
sat on the ground) 23
- True
and genuine human needs 131
political economy 95
rustic development and
town planning 177
- Trusteeship 4, 22, 81, 92, 95,
99-102, 116, 125, 168-72
- Tuberculosis 178
- Tubers 46
- Tubes of porous clay for use in
water-efficient irrigation 144
- Tugwell, Rexford 18, 78-79
- Tumult of 20th-century novelties 165
- Turkey 1
- Turning
a moral argument about pollution
against all the World-Bank
proposals for liberalization 157
back the forces of society 33, 151
snakes, rats etc. loose elsewhere
after catching them 155
- Twentieth century, the ix, 165
- Twentieth Century, The* 33
- Twigs (used as toothbrushes) 31
- Two primary factors (according to
Schumacher) in the economy 130
- Tyabji, Nasir (104: *TCC*)
- Tyranny 96
- Umbrellas (cited by Kumarappa as
articles of "modern demand") 52
- Unattainability of a
very valid open-system model 158
- Unbalanced
economies 134-35, 138
strands of city energy reaching
into distant regions 137
- Uncritical application
of exotic social concepts 127
- Under-
-bidding 97
-consumption 180
-employment 36, 173, 180, 184-85
-estimating damage to children 150
-mining market-expansion 164
- Undhela 25
- Unearned income 57, 180
- Uneconomic alleged economic progress 131
- Unemployment 24, 36, 56, 60, 73, 80,
82, 108, 110, 115, 119, 141, 178,
180; *see also* Underemployment
- Unemployment insurance 173
- Uneven expansion 120
- Unfeasibility of
eschewing violence completely
(according to Gandhi) 155
hundreds of millions of chaste marriages
(as advocated by Gandhi) 155
improvements in rural productivity
without prior city development 139
- Unforeseen bad effects of tinkering
with very complex systems 158
- Unhealthy competition 41, 87, 136, 157
- Uniformity of products 125
- Uninterrupted exchange of the
products of labor 175
- Union and Translation of the Four
Gospels* 62
- Unions, unionism 101, 170, 178-79
- Unique course of India's history, affecting
(according to Kumarappa)
her cultural values 127, 182
- United
Nations 125, (155: *UNN*)
States of America vii, 39, 126
- Universal primary schooling 52-53, 56
- Universe, the 111, (135)
- Universe Around Us, The* 29
- Universities
Abo Akademi xiii
Berlin 133
Bogaziçi xiii, (1)
Bombay 177
Calcutta xiii
Cambridge 1, 73, 80, 82, 123, 136
German 61
Gujarat Vidyapith 23, (144)
Harvard xiii, 2, 6, 13, 122, 156
Jamia Millia Islamia 100
Jawaharlal Nehru xiii
Kerala (1)
London 131
Middle-East Technical xiii, (1)
Oxford 60, 130, 173, 182
Rangoon 75
responsible for unemployment 180
St. Gall xiii
Stockholm 128
Viswa Bharati xiii
- "Unlearning" (advocated by Gandhi) what
India had learned from the West 104
- Unlimited economic activities 141
- Unnecessary psychological concepts
(avoided by Kumarappa) 158
- U. N. Newsletter* (155: *UNN*)
- Unorthodox religion (of Tolstoy) 62
- Unpopularity (of Kumarappa) 143
- Unprecedented
order of magnitude of current
rates of depletion and pollution 159
problems, solutions and work 139
- Unreliable economic statistics 127, 182
- Unremunerative stages in the
course of processing raw
materials into finished products 184
- Unrestricted extension of use of money 186
- Unscientific tapping of underground
water 154
- Unstable money 177
- Unto This Last* 51, 60, 92
- Untouchables/Untouchability 75, 91-92
- Upanishad, Isa* 111-12
- Uplifting
backward races 116
religion 178
the rural economy 180
- Upright judges, shooting of (some-
times, according to Davenport
economically productive) 13
- Urban
filth 79, 86
finance, technology, values 162
innovation 137
League 15
neighborhoods flourishing or dying 137
noise, darkness and poisonous fumes 97
sophistication 104
- Urbanization 131, 137
and high infant mortality 170
of the countryside 162
- Urdu 144
- Utility 60, 179
- Utilizing local and regional conditions 177
- USA vii, 39, 126, 128, 179
- Useful functions performed (according
to Kumarappa) by certain tradi-
tional Indian institutions 147
- USSR ix, 33, 44, 49, 52, 86, 175
- Usury 175
- Utilitarianism 51
- Utrecht, Treaty of 171
- Vacations (most charming, according to
Brandt, if taken only occasionally) 142
- Vakil, C. N. (51: *VBP*)
- Valotri 25
- Value(s), valuation 43, 127
absolute vs marginal 135
Asian 127
of cattle 180
distribution of 186

- Value(s), valuation** (*cont.*)
 ethical: *see* Normative economics
 regarded as extraneous to "scientific"
 economic theory 13-14, 61,
 76, 116, 124, 131, 146, 164
 monetary 69
 of precious metals 180
 in relation to utility and to price 179
 scale of 134
 of soybeans 181
 spiritual, human and ecological 133
 use- 69
- Van Nostrand Reinhold** 153
- Variations**
 in industrial profits 178
 from accepted formulas
 of economic theory 127, 182
- Various different kinds of unit of
 measure used in medical science** 146
- Varma, Pavan K.** (50, 161: *VGM*)
- Varna system** 91, 95
- Vast sums lent to India** (a result
 of McNamara's influence) 127
- Veblen, Thorsten** 3, 13, 77-79
- Vegetables** 46
- Vegetarianism** 46, 147
- Velocity of circulation of money** 180
- Vernadsky, Vladimir I.** (86: *VMB*)
- Versailles Treaty** 174
- Very**
 high income-elasticity 156
 rapid population increase 126
- Vested interests subverting
 the environmental movement** 128
- Veterinaries** 180
- Viceroy(s)** 26, 29, 54, 67, 110
- Vicious circle** viii,
- Victoria, Queen** 66
- Victus, Solomon** 2, (4, 23, 47,
 55, 89, 143, 160, 163: *VRE*)
- Viennese**
 ideologue (von Hayek) 123
 newspaper (*Neue Freie Presse*) 175
- Vietnam** 2
- Village(s)** 23-25, 39-40, 47, 188
 -administration 176
 affected by Community Develop-
 ment Program 56-57
 better served by bullock-carts
 than by cars and trucks 106
 coöperatives 45, 48
 culture, education, organization 45
 -government 120
 -growth 125
 houses 32
 -industries 45, 51, 55, 104, 125, 144
 -life 132
- Village(s)** (*cont.*)
 urged by Gandhi to produce
 their own primary needs 108, 110
 -reconstruction 104, 108
 school(s), lack thereof 20
 self-sufficient 125, 147
 unable to produce certain articles 105
- Village Industries Association: see** AIVIA
- Villagers predicted by Gandhi to take pos-
 session, in free India, of land without
 compensating absentee landlords** 102
- Vinaik, M.** (2, 4-5, 14, 23,
 27, 30, 34, 36-38, 50, 52,
 104, 111, 143: *VKC, VKQ*)
- Vinoba Bhawe** 57
- Violation, accepted by factory workers,
 of their own personal principles,
 in order not to lose the amenities
 provided by their employers** 44
- Violence** viii-x, 34, 41-42, 44,
 52, 114, 116, 138, 155
- Viruses** 153
- Vishnugupta: see** Kautilya
- Viswa Bharati University** xiii
- Vital**
 non-monetary budgets of women
 (according to Geddes) 177
 sources and sinks 134
- Vitamin A** 145
- Vivesvaraya, M.** 181
- Vizianagram** 179
- Vocation(s), inherited** 91, 139, 162
- Voltaire, François Marie Arouet de** 170
- Voluntary**
 . restriction of wants 76
 use of earnings for benefit
 of humankind 101
 poverty 97-99, 118
 simplicity 104, 115
 Simplicity Organization 141
 work 63
- von Carlowitz, Hans Carl** 83
- von Hayek, F. A. von** 114, 123, 150
- Vulnerable laborers** 118
- Wackernagel, Mathis** (135: *WEE*,
WNC, WRF, WRM)
- Waffling (by Nehru)** 160
- Wage**
 -goods 51
 -levels 48, 92, 94
 -rate 118
 -slavery 103
 subsistence- 59, 115
 -working class, origins of 178
- Wagedom** 63
- Wager, Pascal's** 159
- Wagner, Adolf** 14, 17
- Waldorf schools** 179
- Wales** 110
- Walras, Léon** 17, 152
- Walters, Mark Jerome** (153: *WSP*)
- Wantlessness** 125
- Wants vs necessities** 44
- Warehouses** 161
- War(s)** 5-7, 11, 18, 20, 22, 26-27, 34,
 37, 39-41, 44-45, 65, 75, 79, 87,
 91, 7-98, 109-11, 115, 122, 129-
 131, 131, 133, 138-39, 144, 147,
 149, 153, 164, 170-74, 178, 189
- War and Peace** 61
- War**
 debts 174
 Resisters' International 47
 -time control of industry 173
 -torn Germany 130
- Wardha** 30, 52
- Washington, Peter** (179: *WBB*)
- Waste**
 a disadvantage to society caused
 (according to H. G. Wells) by
 the existence of a rich class 175
 in the kitchen 95
 of labor 119
 produced by a given population 135
 in Punjabi villages 181
 of productive capacity 173
 toxic 156
- Watches (cited by Kumarappa as an
 example of a modern product
 that traditional artisans could
 learn how to make)** 53
- Water**
 as a capital resource 153
 claiming (according to Kumarappa)
 attention and regard 158
 -conservation 55, 57, 160
 drinkable 121
 -efficient irrigation 144
 in a fountain vs in a pitcher (an
 important kind of distinction
 according to John Locke) 70
 -logging 154
 polluted 142, 153
 -recharge 154
 serviceable 157
 -tables 154, 160
- Way of life**
 lazy 45
 purely agricultural 132
 violent 131
- Weakness**
 military 33
 personal 168
- Wealth** 179
 bestowing social power 95
 -circulation 95
 -concentration 49
 -distribution 179, 186
 -generation 157
 given up by Kumarappa
 in order to serve the poor 98
 human value in 35
 national 18, 20, 35, 100
 not causing poverty
 (according to H. G. Wells) 175
 -redispotion 126
- Weapons**
 of destruction 97
 of mass destruction 73
 trade in 149
- Weather,**
 cold 168
 ever more destructive nowadays 153
- Weavers, Weaving** 23, 32, 68-69,
 103, 106, 108, 118-19
- Weddings** 25, 97, 187
- "Weekly War News"** 26
- Weibull, Jörgen** (124: *WS*)
- Weight, age, temperature, heartbeat, cell-
 counts, etc. requiring, in medical
 science, different kinds of units
 of measure** 146
- Weighted average of**
 (a) quantitative benefits multiplied
 by (b) quantitative probabilities 158
- Welfare** viii, x, 11,
 common 178
 -economics 80-82, 117-22
 of humanity 20
 of India 172
 of one's household 58
 maximized allegedly by capitalism 149
 of one's neighbors 44
 -scheme(s) 44
 -state(s) 19, 76-77, 117, 123
 of the working classes 73
- Well-**
 -balanced set of economic activities
 amongst a people 19
 -being 19-20, 48, 63, 95,
 101, 118, 121-22, 141
 -built houses, decayed into ruin 37
 -developed network of railways 21
 -directed propaganda 185
 -intentioned
 advertiser (Chester Bowles) 55
 anti-poverty programs 54, 161
 -meaning bureaucracy 4,
 -ordered society 5, 149
 -tempered mortar 95
 -to-do people
 the main beneficiaries of Nehru's
 anti-poverty programs 56
 spending a lot on weddings 187
 supporting Gandhian social work 32

Wellesley, Richard Colley 68
 Wells 23, 56, 121, 161, 170
 Wells, H. G. 29, 175
 Western
 accounts of prosperity in India
 before British rule, and of
 poverty during it 20-21, 29, 156
 civilization, urban 26, 30, 97
 culture 10, 83, 89,
 journalists 79, (122), 175
 need (according to Myrdal) to reduce
 unnecessary consumption 127
 pacifist movements,
 criticized by Kumarappa 47
 Puritan legacy 127
 readers 10, 114, 126
 -type industrialization,
 Indian attitudes toward 105, 111
 Westernization 132
 Weyant, John P. (76: PWD)
 Wet-nurse(s) 45, 140
 "What are Spiritual Gifts?" 168
What Then Must We Do? 62
 Wheelwrights 188
 "Where you Travel when you Sleep" 169
 Whitman, Walt 20
 White Man's Burden 116
Whole Life Economics 141
 Whole-meal
 bread 38
 rice 31, 33
 Wholesome
 conditions for growth 45
 work 45, 103, 146
 Whyte, Robert O. (179: JWR)
Why the Village Movement? 36, 40
 "Why then is India Poor" 9, 15
 Wild, John (5: WAC)
 Wives
 Adam's 103
 Gandhi's 104
 Will-power 41, 77, 87, 134, 158
 Wilson,
 Edmund (186: MWB)
 E. O. (157: WCU), (165: WFL)
 Wine 173
 Win-win conflict-resolution 116
 Winsemius, Pieter (135: MWY)
 Winslow, Ted (147: WPE)
 Wire netting 52
 Wisdom,
 impeccable, unchallenged, yet illogical,
 meretricious, even dangerous
 (according to Galbraith) 123

Wisdom (cont.)
 of using small-scale trial-and-error 150
 of economists foregoing unnecessary
 psychological concepts 158
*Wisdom
 and Waste in the Punjab Village* 181
of Confucius, The 37
 "Wolf-pack" communities/societies
 26, 36, 147
 Women
 aroused to political interests 178
 controlling the sizes of their families
 by resisting their husbands 112
 degraded in India under British rule 9
 their devaluation aggravated by
 the spread of Christianity 141
 doing unpaid work 81, (141), 146
 elemental and involved, vigorous
 yet refined, effective in the
 kitchen and inspiring in the hall 177
 exercising authority with foresight 35
 living under feudal vs under capitalist
 patriarchy in Sri Lanka 140-41
 nursing babies 45, 140
 old, picking grass seeds for food 37
 with starving children 93
 their status ca. 1920 in India depending
 on their position in the family
 and in home life 8
 supplementing their husbands' incomes
 by spinning 108
 writing on economics 136-42
 Women's Environment and Development
 Organization 141
 "Women in India:
 Their Status in the Social Order" 8
 Wood,
 Barbara (130-32: WPS)
 John Cunningham (78: WTV)
 Woodcock, George (63: WAP)
 Work (see also Labor)
 according to
 a plan shaped gradually by
 free consensus 79
 a preordained philosophy 39
 agricultural,
 "innocent and contented" 97
 not diligently carried on 125
 seasonal 105
 alienated (44-45), 70-71
 allegedly
 done by God 166
 scientific (done by
 neo-orthodox economists) 82
 altruistic 81, 187-88
 arduous/rough 32, 62, 159
 around the clock 118
 Carson's, praised and slandered 130
 character-forming 133
 compounded of many parts 45, 146
 conditions of 133, 169
 demanding, yet free and fulfilling,
 e.g. composing music 71
 dignity of 45, 140

Work (cont.)
 done
 in conditions of dignity and
 freedom 133
 in ecologically lasting systems 41
 by the harder-working, female
 half of India's population 146
 hitherto in India by animals but
 then (in the 1940s) by humans 186
 by mothers and wives for their
 families 81
 drawing upon energy provided by
 nutrients 145
 faithful 96
 free (i.e. not alienated) 71
 freely chosen 63
 Gandhian, in India 98, 144
 monotonous 73
 more remunerative when done with
 highly developed machinery 119
 in neighborhood economies 151, 187
 philanthropic and unpaid 81
 physical
 for at least a couple of
 hours each day 103
 shirked by people who thereby
 become spiritually stunted 103
 poor-quality at half price 94
 properly done and appreciated 134
 productive at low capital cost 51
 relief- 30, 47, 120
 repetitious in mass-production 73
 rightly done for a just price 93
 satisfying 151
 scientific and disinterested
 for the benefit of humanity 42, 81
 social/political 53
 for equitable distribution 98
 for the removal of caste 92
 in the USA 15, 17, 141
 sustained by energy due to nutrients 145
 toward a predetermined output 44
 transplanted from cities to
 non-urban locations 137
 unpaid
 philanthropic or political 81
 done by women 81, (141), 146
 of unprecedented kinds 139
 varied 43
 wholesome 45, 103, 146
 voluntary 63, 81
 Workers
 agricultural 48
 on strike 93
 subjected to abnormal
 temperatures and/or humidity 178

Workers (cont.)
 treated as
 a commodity 70
 co-partners 101
 vulnerable 118
 Working
 -class in India 176
 hours 173
 Workmanship 79
*Work, Wealth and Happiness of
 Mankind, The* 29, 175
 World
 affairs 174
 Bank 46, 127, 138, 145, 156-57
 Council of Churches 11
 Missionary Council 10
 peace 41, 87
 population explosion 155, 157, 165
 wars 18, 37, 39, 41, 87, 111, 122,
 129, 138, 165, 170, 173, 178
World Disorder and Reconstruction
 29, 173
 Worsening climate 160
 Worsley, Thomas 69
 Worst and best that human
 nature is capable of,
 both due to cities 132
 Worster, Donald (86: WAE)
 Worthwhile purpose in life 124
 Wrecking the planet 165
 Yakushiji, Taizo (135: MWY)
 Yearly population increase 126
 Yoga 168
Young India 19, 25, 27
 Young Men's Christian Association 6
 Youth scorned their elders 171
 "You Travel When you Sleep" 169
 Yonay, Yuval P. (77: YSS)
 Zamindars 35
 Zeitz, Robin (120: APF)
 Zero-sum game 136
 Zweig, Stefan 105



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